Tampere University

Marika Naumanen

NO ROOM AT THE BUNKER

A Critical Discourse Analysis on Civil Defence and Nuclear Disarmament Movement in Britain

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ABSTRACT

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The nuclear disarmament movement was among the most remarkable social turmoils during the Cold War in the United Kingdom. Although the movement has been explored extensively in academia, its take on civil defence systems has not been mapped in the previous research. This thesis examines preparedness, activism and civilian advisory relating to nuclear mishaps in the UK from the beginnings of the nuclear disarmament movement to the current day. I scrutinise these topics through the concept of risk society, a theory developed by sociologists Ulrich Beck and Anthony Giddens, which describes the birth of incalculable risks accelerated by the advancement of technology and constant need of expertise to contain the potential hazards it causes. I conducted seven semi-structured interviews with eight nuclear disarmament activists who live in different parts of Britain. The analysis of these interviews utilises critical discourse analysis, that is based on Norman Fairclough's stance on discourse in modernity to support the theoretical approach to risk society.

This study explored three different discourses that emerged from the interviews: the discourse of distrust, the discourse of injustice, and the discourse of worry of forgetting. The first of these is related to a governmental approach to addressing the public on civil defence and how the activists found this information unreliable. The second discourse involved presenting the social wrong created by nuclear weapons in different levels of governance. The last discourse presents concerns about the movement diminishing in the future. This worry results from the youth focusing on other fields of activism, such as climate change awareness, while the membership of nuclear disarmament movement declines. These aspects provide a viewpoint on the current state of civil defence in Britain and also shows how the public acknowledges it. All provided discourses connect to Beck's organised irresponsibility, which highlights the absence of connection between the decision-makers and the rest of the population. Civil defence has dropped out from public discussion along with nuclear weapons, which is inimical for both the nuclear disarmament movement and preparedness level of the population.

Keywords: nuclear disarmament movement, civil defence, United Kingdom, risk society, critical discourse analysis.

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Abbreviations and Acronyms

C100	Committee of the 100
CDA	Critical Discourse Analysis
CDC	Civil Defence Corps
CND	Campaign for Nuclear Disarmament
DAC	Direct Action Committee
EMP	Electromagnetic pulse
END	European Nuclear Disarmament
H-bomb	Hydrogen Bomb
HMNB	Her Majesty's Naval Base
HMO	Her Majesty's Office
HO	Home Office
IAEA	International Atomic Energy Agency
ICAN	International Campaign to Abolish Nuclear Weapons
ICRC	International Committee of the Red Cross
IHL	International Humanitarian Law
INF	Intermediate-Range Nuclear Forces Treaty
IR	International Relations
IWM	Imperial War Museum
LSE	London School of Economics
MAD	Mutually Assured Destruction
MOD	Ministry of Defence
NATO	North Atlantic Treaty Organisation
NCANWT	National Council for the Abolition of Nuclear Weapon Tests
NFLA	Nuclear Free Local Authorities
NGO	Non-governmental organisation
NPT	Treaty on the Non-Proliferation of Nuclear Weapons
SALT	Strategic Arms Limitation Talks
SNP	Scottish National Party
UK	United Kingdom
UN	United Nations
US	United States
WBGT	Wet bulb global temperature
WMD	Weapon of mass destruction
WoT	War on Terror
YCND	Campaign for nuclear disarmament youth

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1 Introduction

The history of British nuclear weapons sparked in 1954 when the United Kingdom conducted a nuclear weapon test as the third country in the whole world. As a precursor for that, British scientists were involved in the design of the first atomic weapons in Manhattan Project during the Second World War, which was a starting point of fluctuating cooperation in weapons production between the US and the UK. (Milne in Holdstock et al. 2003, 11–14.) During the decades, the British government has launched several nuclear projects. The most well-known of them is the nuclear submarine programmes Polaris and its descendent Trident that has operated in the Atlantic since 1968.

The aim to consolidate superpower status with nuclear weapons did not come without consequences. After the Cuban Missile Crisis in 1962, the UK started to dismantle the nuclear preparedness systems, and in 1968 it mostly trusted deterrence as an only noteworthy civil defence measure against nuclear attack. (Grant 2010, 175–180) This process is somewhat understandable, as the proper civil defence during a nuclear war is somewhat impossible (ICRC 2015), as the effects of the attack would be unpredictable, such as possible worldwide famine (Helfand 2013) even in a minimal nuclear exchange. Also, the UK is a densely populated island state, and as such the preparedness plans, including the evacuation plans, are somewhat challenging to execute. (Campbell 1982). The Home Office has tried to facilitate civil defence through PSA campaigns, constructing bunkers together with the local authorities across the country with varying results.

Meanwhile, the UK is the ground zero of the nuclear disarmament movement, which began in 1958, similarly when the hydrogen bomb was introduced to the word. The nuclear disarmament movement is not a singular or unified actor. Instead, it operates as a fragmented social entity that covers a multitude of different organisations vocalising a variety of political opinions and orientations that only share a wish of the world free of nuclear weapons. The nuclear disarmament movement, and particularly Campaign for Nuclear Disarmament (CND) has been a significant factor in the British civil society and formed a counterforce for politicians and government officers with pro-nuclear attitudes. Although the actual nuclear disarmament did not actualise, the movement shared information on the results of a nuclear detonation and its aftereffects efficiently.

Despite their interrelatedness, the nuclear disarmament movement and civil defence have been usually researched separately, which makes room for exploring them more together. Some studies (e.g. Grant 2008, 2008; Hennessy 2005; Hudges 2003) have covered the history of nuclear civil defence in different contexts, but they had mostly focused time before 1968 when the government put down last official civil defence programmes. As Arnold (2014, 20) claims in her doctoral dissertation, nuclear civil defence in Britain, particularly after post- 1972 period is not studied extensively and thus provides an excellent platform for further examination. Studies from these latter times focus more on how the existence of nuclear weapons arsenal in the country have shaped its culture (Hogg 2016, Stafford 2012). Preston (2008, 2015) has also explored this other way around by unveiling how the cultural norms shape the preparedness planning, including nuclear civil defence.

The nuclear disarmament movement, however, has left its footprint on academia and the UK is not an exception. For instance, Lawrence Wittner has extensively covered the worldwide history of the movement. He contributes to the tradition with his 3-part series called History of the World Nuclear Disarmament Movement (1997-2003) and other works (2009, 2013) among the other scholars that have focused on the British perspective (e.g. Alfsen 1981; Kaldor 2018; Thompson 1971, 1988) These studies often are written by the active members of the movement, as many of them have a middle-class, academic background (Carter 1992, 55; Wittner 2007, 227). Few studies combine the nuclear disarmament movement with civil defence, but they are mostly related to specific campaigns such as CND's Spies for Peace (Carroll 2010). This lack of studies again rationalises the need for further studies for these two topics together.

My thesis combines these two crucial topics on British nuclear history. I formed my research questions as follows: *How nuclear disarmament activists comprehend nuclear civil defence in Britain* and *what kind of social wrongs can be found on their opinions on nuclear civil defence.* I conducted seven interviews with eight informants across the UK. All of them have been active members of the nuclear disarmament movement in the last decades. To analyse these interviews, I apply the framework of critical discourse analysis (CDA), as I sought to find particularly the drawbacks that my informants see in the current civil defence systems in Britain. CDA focuses on finding structural wrongs on social systems (Chouliaraki and

Fairclough 1999), and thus, it is suitable for my study to explore these in detail. I present the CDA as a method in chapter 4.

I chose to deepen my analysis by framing these discourses with the theoretical approach of risk society. The concept depicts the risks that technological advancements create by evolving more and more specialised. This development results in need for expertise to contain these risks, and even then, the needed preparedness measures are difficult to predict due to complexity and amplitude of potential accidents. This classic of sociological work comes from the writings of Ulrich Beck and Anthony Giddens, who created the concept of reflexive modernity. Beck, particularly, was inspired by the Chernobyl accident in April 1986, which stands as a kind of the empirical epitome of modern risk. Although Beck wrote his book as a reaction to the nuclear plant accident, both him and Giddens also mention nuclear weapons as the ultimate manifestation of the risk society. As these, both nuclear industries intertwine in Britain (Holdstock et al. 2003), the selection of this theoretical framework seems justifiable. Moreover, this theoretical framework has not been extensively applied to British nuclear weaponry before, which deepens the need to explore risk society in this context.

1.1 Definition of the key concepts

A nuclear weapon is an explosive device, which releases an enormous amount of energy by utilising either fission or fusion reactions from radioactive materials, or combinations of these two. First nuclear weapons that utilised fission energy were introduced at the end of Second World War. The more efficient thermonuclear bombs (also referred to hydrogen bombs of H-bombs) emerged in the middle of 1950s. Nuclear weapons are fundamentally different from conventional explosives, as the amount of energy in the blast is enormous, and aftereffects, such as radioactive radiation and fallout cause vast consequences on the affected areas. After bombings in Hiroshima and Nagasaki, nuclear devices have not been used in warfare, mostly because of their gruelling effects. However, at least eight states have performed over 2000 nuclear tests during the last 70 years, which has allowed to continue the development process for more effective nuclear weapons and study their aftereffects. (Encyclopædia Britannica 2020; Bulletin for Atomic Scientists Science and Security Board, 2020.)

During the Cold War stockpiling of nuclear weapons became relatively frequent political strategy, especially for the United States and the Soviet Union. The number of nuclear weapons peaked in 1968 when there were almost 65 000 nuclear warheads in the whole world. Due to disarmament activities and the end of the Cold War, there are under 10 000 active nuclear warheads globally according to statistics from 2017. However, this alone would be enough to cause significant damage to the whole Earth. (Bulletin for Atomic Scientists 2020). Today the UK possesses altogether 210 nuclear warheads, from which about 120 are operational. That creates around 1% of the world's nuclear stockpile. Maximum 40 missiles are patrolling on the submarines at once, which means a maximum of eight active missiles per submarine. The UK has also committed on some disarmament activities but is still planning to renew current Trident submarine missile system during the next decades. Currently operating Vanguard ballistic missile submarines will be replaced with the more modern Dreadnought class, which will carry the same type of Trident II 5D missiles as its predecessor. The UK spends around £8.9 billion to maintain and build its nuclear arsenal. (MOD Factsheet 2016, MOD Policy Paper 2018, ICAN Website 2020.)

According to the Oxford Dictionary of Disaster Management, the civil defence is defined as *organised training of civilians to participate in protecting life and property in case of war and disasters*. The term is sometimes used synonymously with civil protection, although civil defence highlights the top-down administrative approach; the government tells its citizens what to do in the case of an attack, while civil protection describes the processes that are executed in the field, sometimes without authority. According to the International Committee of the Red Cross (ICRC), the civil defence also contains a component related to the resilience, as it facilitates the recovery of the community after the crisis. Additional Protocol I of Geneva Conventions sets civil defence as a mandatory duty of the participants in a conflict as defined by International Humanitarian Law (IHL). According to this protocol, civil defence includes 15 different humanitarian tasks[1] that are mandatory for the warring party to arrange. Civil defence is always a responsibility of the state to coordinate, although individuals and organisations can contribute to this process. Moreover, the foreign staff

[1] these tasks are warning; evacuation; management of shelters; management of blackout measures; rescue; medical services – including first aid – and religious assistance; fire-fighting; detection and marking of danger areas; decontamination and similar protective measures; provision of emergency accommodation and supplies; emergency assistance in the restoration and maintenance of order in distressed areas; emergency repair of indispensable public utilities; emergency disposal of the dead; assistance in the preservation of objects essential for survival; complementary activities needed to carry out any of the tasks mentioned above (ICRC 2001).

conducting civil defence tasks in the area of the state are protected by IHL (Dalberg and Rubin 2017, ICRC 2001.)

Interestingly, multiple scholars use “civil defence” and “nuclear civil defence” as synonymous terms (Arnold 2014, Grant 2010). This supposition might be rooted to the holistic perspective of the civil defence itself: civil defence facilities typically serve as multipurpose shelters, whereas the survival from the nuclear detonation sets the ultimate limits for the durability of the shelter facilities. In this thesis, however, I aim at using the term nuclear civil defence to make a difference between conventional warfare and nuclear attacks, as the functionality and reasonability of civil defence are somewhat different in these contexts. International Court of Justice (rep 1996, p. 226) has claimed before that the use of nuclear weapons is generally contrary to the IHL because of their vast humanitarian consequences, although the complete criminalisation of the nuclear devices in warfare remains unlikely.

Nuclear disarmament movement is an umbrella term for multiple different organisations that support varying levels of disarmament. Although the nuclear disarmament movement includes a variety of organisations which have solely committed on this particular purpose, other actors involved in it should not be forgotten. The movement is a network between these organisations, political parties, labour unions, other societies based on profession, religious groups, artists, and other societal actors who actively contribute for this cause (Wittner 2013). Nuclear disarmament movement itself is a part of the historical spectrum of different peace movements that date back from the 19th century. Even if the public has opposed war and violence before that, was the 19th century the time when the peace movement gained its current social structures and the set of activities that are still in use today, including educating the public and advocating in the political spectrum (Cortright 2008, 25–6.)

In this thesis, I mostly focus on CND supporters. Campaign for Nuclear Disarmament was founded in 1958 in the Westminster Central Hall public meeting in February 1958. The CND has taken its role as the essential antinuclear organisation in both British and global history. CND gained supporters mostly from the academic circles, youth, religious groups and the Labour party, and formed around 450 subgroups by 450 according to these demographics. (ibid. 134–5.) It is important to note that CND was not the only organisation that was involved

in nuclear disarmament, and most activists were engaged in multiple social movements at the time. That is why I wish to highlight that my informants are not solely CND activists, but supporters, which might mean that they have mostly practised their activism in different organisations that are supporting the same cause. I return to more precise definitions and history of the movement in the next chapter where I present the literature review.

1.2 Nuclear weapons, civil defence and disarmament movement today

The United Nations adopted a resolution n summer 2017 to ban nuclear weapons (UN Resolution A/C.1/71/L.41) only 54 countries have signed the treaty, none of them a holder of the nuclear weapons. Treaty comes to force in the beginning of the year 2021. In January 2020, Bulletin of the Atomic Scientists moved the hands of their famous doomsday clock to 100 seconds to midnight. The analysis of the Bulletin also recognises other risks such as climate change to their estimation of the current state of the risk of significant deterioration of living conditions globally. However, they still consider the nuclear threat a significant threat to the existence of modern society. (Bulletin for Atomic Scientists Science and Security Board, 2020). The Bulletin describes the current nuclear realm followingly in their latest doomsday report:

In the nuclear realm, national leaders have ended or undermined several major arms control treaties and negotiations during the last year, creating an environment conducive to a renewed nuclear arms race, to the proliferation of nuclear weapons, and to lowered barriers to nuclear war. Political conflicts regarding nuclear programs in Iran and North Korea remain unresolved and are, if anything, worsening. US-Russia cooperation on arms control and disarmament is all but non-existent.

The most known dissolving arms treaty is the Intermediate-Range Nuclear Forces Treaty (INF), which is currently disputed by both the US and Russia. The treaty was ratified initially in 1988 and sparked a wave of disarmament between the Cold War enemy states as these two parties are accusing each other with violations on this agreement and have currently decided not to follow (NATO INF Factsheet 2019). In addition to traditional nuclear states, there are multiple new actors in the field. Lately, disputes between India and Pakistan, whom both performed nuclear tests in 1998, have raised concern on the potential nuclear war between these two parties especially after their political relations became ever tenser (Robock et al. 2019). Moreover, relations between the US, North Korea and Iran have become more unpredictable than ever. The Voice of America (Cho 2020) reports that the US lawmakers claim these two countries to be the most significant barriers for the Nuclear Nonproliferation Treaty (NPT). This treaty aims to prevent the spread of nuclear technology

by restricting the countries that are allowed to have a nuclear arsenal (IAEA 1970). NPT has been disputed or openly not ratified by some countries, such as India and North Korea, while some actors like Iran have a very complicated relationship to the treaty (Doyle 2017). That makes nuclear regimes less credible compared to the past.

Despite the situation with nuclear weapons being relatively unstable worldwide, nuclear civil defence is not widely discussed nowadays in media. In Finland, the major newspaper Helsingin Sanomat has created some stories on the Finnish perspective of the systems in place in the capital Helsinki (e.g. Martelius 2018), but internationally topic is not discussed extensively. In 2017, the Imperial War Museum (IWM) in London republished a civil defence pamphlet Protect and Survive[2] as a part of anti-war movement exhibition (Guardian16 March 2017). Otherwise, nuclear civil defence remains mostly as a historical curiosity that is mostly presented as a part of a historical or science fiction entertainment (Hogg 2016).

Although scholars acknowledge the existence of the risk of nuclear war, the public is not considering its existence as it used to during the Cold War. Especially young people do not see the nuclear exchange as a threat. According to Rachel Bronson, the president and CEO of the Bulletin of the Atomic Scientists, the younger generation has not been exposed to preparedness education and thus regards other threats, such as climate change and street violence, more prominent issues than a nuclear threat (BBC4 Podcast, 2018). Especially in Great Britain, the exposure to nuclear preparedness has declined after the outrage that the Protect and Survive campaign evoked. This negative publicity led to questioning the need for the project's existence and the motivations behind it. The decline of preparedness education has been continuing since the 1980s and has shown no signs of returning (Preston 2015, 226).

Apart from nuclear civil defence, nuclear disarmament movement is yet showing signs of gradual decline as well. The membership of CND has shrunken from 460 000 the 1980s to the current a couple of thousand members (Lewis 1997). As mentioned above, youth is currently taking a stance for other forms of activism, which I analyse more on chapter 5.3.

[2] Protect and Survive pamphlet from 1976 sparked my interest on this particular topic. Originally, I planned to structure my thesis around analysis of the pamphlet, but after receiving a grant from The Teemu Tuominen International Crisis Management Fund I decide to expand my study with local interviews with British nuclear disarmament activists. I present the pamphlet more in detail in chapter 2.1.

Nuclear disarmament movement does not have a similar role in society as it used to have during the Cold War years; the public knowledge of nuclear risks might be in decline. As this declining public interest seems to be continuing at some extent, I decided to pick this topic for my thesis to raise the consciousness of current drawbacks and risks, which also supports Critical Discourse Analysis as the selected analysis method for this study.

1.3 Structure of the thesis and connection to the peace research

This thesis consists of five main chapters, including this introduction. Firstly, I depict the research literature about nuclear disarmament movement and British nuclear civil defence to illuminate the academic aspect and previous studies of my topic. Also, I present the theoretical backbone of the thesis, the concepts of risk society and reflexive modernity. These altogether form a literary review of the thesis. Secondly, I introduce the methodology of the study and how I collected my data. The limitations of this study are also in this section. Thirdly, I perform an analysis from the data and give my interpretation out of it. This section consists of three different discourses I found from the interviews I performed. Lastly, I recapitulate the results in conclusion, where I also present the further research suggestions.

The thesis interrelated to the tradition of peace research in various ways. Firstly, nuclear weapons and non-proliferation have been an important topic for this field, even though the peak of discussion has decreased after the end of the Cold War. Secondly, some of my informants are peace research fellows who have contributed themselves to the academic discussions in the field. It is understandable that the members of the academia also partake activism, as the scientific knowledge is vital for non-governmental organisations that promote changes for international, national and local policies. Moreover, some of the scholars I site, are celebrated peace researchers, such as Lawrence Wittner and E.P. Thompson, both of them members of nuclear disarmament movement. Thirdly, the nuclear disarmament movement has been a significant actor among other peace movements. For instance, the original logo of CND is now the most known common symbol of peace. That shows that peace research would be incomplete if it does not take into account existing everyday practises of peace, such as activism.

2 Historical background

2.1 UK and nuclear civil defence

Matthew Grant (2010, 5–9) divides nuclear civil defence in the UK into three different phases; atomic, thermonuclear and shutdown phase. The atomic phase (1945-1954) begun by the intervention of the atomic bomb and were somewhat optimistic on the chances of survival if the war would occur. The test launch of the first thermonuclear bomb, which multiplied the destructive force of nuclear weapons and made civil defence even more complicated, started the second era (1954-1960). The third phase (1960-1968) was mostly characterised by the notion that comprehensive nuclear civil defence would be impossible to arrange, especially in a densely populated country such as the UK, and the best means to keep population safe is adequate nuclear deterrence. Overall, he defines nuclear civil defence as political façade, although a necessary one.

A notable point on Grant's theory is that it does not editorialise the post-1968 time in nuclear civil defence. As Jacquelyn Arnold (2011, 19–21, 31–40) notes, there is not much research on the topic, and the literature that exists tends to fall into two categories. The first body of literature mainly contains politically motivated investigations of the secret civil defence systems of the Cold War era, which were written on time when the discussion on nuclear risks was active. The second body of literature is academic and mostly concentrated on discussing the archival material. There are two waves of this category; the first wave was in the 1980s and second in the 2000s. The publication of the classified material during the Cold War caused the latter.

The academic discussion of civil defence during the first wave of interest in the 1980s was multidisciplinary and extensively political. Significantly medical scholars raised critical voices against government home defence plans as they considered the measures inadequate on protecting the civilians. (Eg. Haines et al. 1983; Hunter-Brown 1989; Smith and Smith 1981). However, medical periodicals provided also instructions on how medical personnel should operate during a nuclear war (e.g. Kersley 1985). Similarly, journalists and academics made their investigations on the topic. For instance, Duncan Campbell (1982) brought into light civil defence planning, which the government classified before. According to Hennessy

(2005), the classification was somewhat understandable, as the fear of the opposite side of Cold War receiving the information remained strong.

Declassification of formerly secret documents motivated historians and social scientists to explore civil defence from the beginning of the new millennium. The topic has gained interest from historical (Grant 2010, Stafford 2012), sociological (Preston 2008 and 2015) and cultural (Hogg 2016) viewpoints. Both Preston and Stafford analyse primarily Protect and Survive- campaign by HMO, which caused a tremendous public outrage after its publication. Moreover, the histories of the nuclear disarmament movement often remember to provide critical analysis of civil defence as well, since it was one of the main targets in the campaigning.

One of the backbones of early nuclear civil defence was The Civil Defence Corps (CDC), which was a voluntary group that operated by Home Office. It started in 1949 and shut mostly down in 1968, leaving only a few of its branches operating, such as the Isle of Man Civil Defence Corps. In its best year, CDC had over 300 000 personnel in 1954, which was about 60% of the amount it was targeting. Most of the volunteers were recruited after the Korean War. The conflict reminded the public of the possibility of the outbreak of nuclear dispute. In its first years, it mostly depended on civil defence veterans of World War II, but soon CDC started campaigns for recruiting more civilians to its crew. CDC targeted the recruitment for women and older men, as those segments would not be conscripted during wartime. (Grant 2010, 64–76.)

After the invention of the H-bomb, the political discourse on civil defence changed rapidly. This turn was mainly caused by the Strath Report in 1955, which was made by a highly secret group of civil servants headed by William Strath. The paper investigated possible outcomes of thermonuclear war in Britain. The results were unambiguous; Britain would not survive even a small-scale nuclear war with ten bombs targeted on its soil, as it would leave 12 million dead and 4 million severely injured. The committee recommended that the government take actions on civil defence by increasing food stockpiling, provide adequate shelter for population, plan mass evacuations from urban areas and moving critical means of production further away from likely targets. The recommendation also provided instructions for home shelters, which are prevalent in the civil defence pamphlets released

by HMO. The investigation was completed after the first British nuclear bomb test in 1954 and kept classified until 2002. (Hughes 2003).

As a potentially destructive force of nuclear weapons increased exponentially, the impossibility of extensive nuclear civil defence became more evident. In 1957, Minister of Defence, Duncan Sandys, published the Defence White Paper, which had a significant impact on the structure of the defence in the UK. The paper discontinued compulsory military service, lead consequently to the end of CDC in 1968 and cut the defence budget radically. What is more, the belief of deterrence as an only functional method of nuclear defence was one of the critical messages of the paper. On the contrary to the recommendations of the Strath Committee, the civil defence only relied on home defence. The paper also highlighted the importance of deterrence effect. The decline of civil defence in Sandys White Paper is undoubtedly one of catalysing events of the British nuclear disarmament movement. (Grant 2008; Holdstock et al. 2002, 13; Navias 1996, 219; Smith 2010.)

In the 1960s the focus on British civil defence shifted from civil protection to the ensuring the continuity of governance and public order, as plans to protect civilians would be at a high cost during peacetime and would only provide a marginal benefit if a war would ever actualise (Arnolds 2014, 84; Stafford 2012). These segments would have been protected with bunkers within the emergency communication officers. Even though there were plans to build several bunkers, only one was built nearby site Corsham in Southern England. Moreover, the HMO continued publishing different householder guides in the case of a nuclear attack. Otherwise, as the civil defence budget remained inadequate, the planning was mostly based on instructions on how to build home shelters by HMO. (Grant 2010, 136–141, 151; Smith 2010.)

British nuclear civil defence was practically driven down in 1968 after the turmoil caused by the Cuban missile crisis settled down. The realisation of the realness of the risk of nuclear war motivated the parties of the Cold War to negotiate on treaties that limit the possession of nuclear devices, which resulted in a minor decline of the number of nuclear warheads in the late 1960s. (Ullrich et al. 2015, 9–10.) Fear of nuclear war remained strong. The conservative governments gained power in both the UK and the US the pro-nuclear attitudes suffused the political climate at the beginning of 1980s, and the nuclear arms race

accelerated again. Both Reagan and Thatcher pursued “peace through strength” which eventually lead to enforcing MAD to its highest (Cooper 2016, 383–5).

As this changed political discourse awoke the nuclear disarmament movement in its second wave, it also had its effect on the discussion on civil defence. Coupled with the anxiety caused by the Soviet invasion in Afghanistan and the Iranian revolution, they raised an upsurge on the protection of civilians in a case of actualising war. HMO had produced Protect and Survive civil defence instructions already in 1974–6 as a part of governmental planning for warfare. These instructions were intended to be secret until the outbreak of war seemed imminent. As a result of multiple press leaks, HMO published the pamphlet and videos in the early 1980s, during the height of nuclear debate. Media was especially critical towards the instructions, and they also produced a wave of responses in popular culture. (Hogg 2016, 136–150; Stafford 2012.)

The response of Protect and Survive was overwhelmingly negative, and justly, also according to civil servants who were responsible for civil defence. According to J.W. Colwill, the campaign was designed only for calming down civilians in a moment of ultimate destruction. Moreover, as funding of civil defence had been sinking rapidly, the possibility to evacuate people became impossible. Consequently, the main tactic presented in Protect and Survive was “stay at home”, which would enable crowd control and avoid mass exodus from the cities during the fallout. Moreover, this would keep the infrastructure free for army usage in a time of crisis (Campbell 1983, 3; Stafford 2012).

Although they actively tried to make pamphlet more egalitarian compared to previous disaster education pamphlets from the late 1960s, where upper-class survival was depicted in detail, it did not achieve the goal ultimately. The pamphlet was still a depiction of the white middle-class British two-storey home with a nuclear family living in it. That symbolises the ideal target of protection in the attack. As civil defence officials’ support would be very limited in the actualising war, it is evident that inequality exists. For instance, those who live in a one-storey building are just instructed to ask for protection from their neighbours, which depicts the nonchalance of the government (Stafford 2012, Preston 2008, 477–9.)

After the leak of the documents, public outrage grew and almost unilaterally condemned Protect and Survive. HMO decided to discontinue the plans to develop further campaigns

on the topic and responded to the dispute with a leaflet named “civil defence- why we need it” in 1981 (Davis 2007, 33.) Moreover, the government cancelled the plans to arrange nationwide Hard Rock- exercise for measuring the preparedness of emergency service officials in the case of nuclear war. According to Campbell (1983, 2), Ministry of defence was already initially very unenthusiastic on the exercise, likely since they already knew that the outcome of the exercise would “damage public confidence”. Moreover, CND arranged a parody campaign called “Hard Luck” on the doors of Pear Tree House, the civil defence bunker in London, where it presented the failure of the exercise and informed public on the proportional inadequateness of civil defence.

Even though Protect and Survive can be described as an utter flop as a method of civil defence, the cultural impact of the campaign was undeniable. In addition to the numerous contributions of the nuclear disarmament movement, nuclear anxiety was also an integral part of music, films and art of its time. These media representations were also portrayals of nuclear anxiety that was central nominator of the 1980’s culture. Protect and Survive fitted well to this continuum and provided a new source of inspiration. Hogg (2016, 145–154) calls the late decades of the Cold War as the time of extreme realism, as depicting consequences of urban nuclear war had a central role in mainstream popular culture. For instance, the concern of the possibility of nuclear war was strongly present in pop music and the songs on the topic succeeded well on charts.

Critical theorists are especially keen to apply theoretical approach on nuclear civil defence, as power structures around shelters provide an exciting platform for the critical viewpoints. Deville et al. (2014) compare shelters of three different countries, Switzerland, India and the UK, through the lens of Foucauldian governmentality. As provably protective shelters in the UK are reserved for the specific targeted group of the population to keep governmental administration going on during the crisis, and the majority have to settle for self-made solutions, the absence of protection forms a clear power structure of preferred survivors. When compared with the Swiss system, which aims at providing equal shelters for the whole population, the UK system seems to trust that there will not be a nuclear war, although the UK is a nuclear state, in contrast to Switzerland that values its neutral reputation highly. In India, shelters tend to be planned with multipurpose use in mind, as in addition to nuclear protection, they are built to last natural disasters as well.

As the UK system trusted citizens to protect themselves if the worst would happen, the power arrangement for providing shelter for political leaders causes unequal priority for power holders. Although a minor group of British citizens decided to take private efforts, such as purchasing own Swiss-made shelter on their backyards, they often remained loyal to the government, as they regarded a nuclear deterrence as a mandatory measure for plausible defence. That can be seen from the discourses in the magazine of the British survivalist community named Protect and Survive Monthly that was published in 1981–2. The magazine included buyers' manuals for bunkers, different survival tips and ads for survivalist products. The political tone in the magazine assured that nuclear war would be survivable and accused nuclear disarmament activists as liars. This small but vocal group legitimised nuclear defence policies of the government and thus helped it to maintain the nuclear weapons system. This part of the crowd also emphasises the class society in the UK, where the rich can afford protection while the working class has to settle for more modest approaches. That also links to the preparedness training of the population.

Continuing from the idea of governmentality Davis (2007) presents public disaster education, including nuclear civil defence drills, through the theory of performativity. Davis claims that public civil defence training is a way to create reality and thus enforce the existence of the risk. As I stated before, Preston (2015) brings this constructive perspective to the examination; it is clear that picturing the risk is also creating the reality of the protected population and also chooses the target of the protection. According to him, it is essential to note those groups who are excluded from the plans. These groups are also either forgotten or left purposefully without advice during the crisis. As these speculations tend to assume a lot from the end-users, it is not value-free or neutral in any way, and always a product of politics of that particular time. The conservative government ruled on the design phase of Protect and Survive, and thus, the protected population in the campaign is based on people who have resources to survive on their own. As the British civil defence system is heavily relying on civilian activity during disasters, disaster education forms an integral part of survival. The trust of governmental institutions and their policies on the disaster education is a primary element on internal crisis management on the time of abnormalities.

Although nuclear civil defence and its public forms are often considered as historical artefacts from the past, some similar discussions are going on today in disaster management. Peter Amacher (2003) maintains that home defence of War on Terror has a

significant resemblance to the Cold War nuclear civil defence as the cost of the protective measures falls on the population, while the government spends its resources on the war and weaponry. Even though Amacher goes through the discussion in the American perspective, it resembles notably its British counterpoints, as local civil protection plans in the UK are rather vague. As WoT is more politically complicated than tactical bipolar composition during the Cold War and the methods of causing damage more versatile, the issue of civilian protection in terrorist attacks has not been criticised widely.

2.2 CND and British nuclear disarmament movement

Scholars have studied the British nuclear disarmament movement extensively, which can be seen in two peaks. The first peak took place in the second wave of the movement in the early 1980s. The second peak rose its head at the beginning of the 21st century (Pythian 2001). Academics seem to be mostly oriented historically, especially the first years of the movement, although the sociological angle is also present (e.g. Mattauch 1989). It is also essential to keep in mind that the members of the movement themselves were academically proficient, thus creating the collection of scientific literature on the subject (e.g. Alfsen 1981; Kaldor 2018; Thompson 1971, 1988). CND is also strongly present on global histories of disarmament movement (e.g. Carter 1992; Wittner 1997 and 2007.)

Even though the movement has its presence in academic discussions, the connection between civil defence policies and the nuclear disarmament movement is not adduced extensively. Cortright (1991, 51) notes that there are methodological challenges in defining the impact of the movement, as the impressions of the members and government officials base on the personal judgement. Although the vanity of nuclear civil defence has been one of the frequent arguments of nuclear civil defence, it has only mentioned briefly in the literature (Hudson 2005 and 2018). Regardless of the challenges, it is crucial to study the peace movement and its effect on civil defence by forming the research questions in a way that they mitigate personal bias.

The nuclear disarmament movement is a significant element of nuclear culture, from the logo of the CND, which has gained a status of universal peace symbol to music, films and art. The term “nuclear culture”, which typically refers to media, art and other nuclear imagery is disputed (Hughes-d’Aeth and Nabizadeh 2017), but it categorises well some aspects of

the Nuclear Age and anxiety of MAD during the Cold War. Although the nuclear disarmament movement has not achieved its goals during its existence, the cultural impact has been significant, especially in the UK. Particularly during the second wave, British pop culture produced material that is especially critical on inadequate measures of civil defence and performs nuclear anxiety experienced by the public (Hogg 2016).

Although the different organisations inside the peace movement are not in unison on their motivations and aims of action, disarmament seems to remain one of the denominative factors of them, especially in the Western societies (Van Den Dungen in Taylor and Young 1987, 276). However, in the UK, four organisations in the Peace Movement were the most active protestors against nuclear weapons; Campaign for Nuclear Disarmament (CND), Committee of Hundred (C100), Direct Action Campaign (DAC) and European Nuclear Disarmament (END). According to my interviewees, a collaboration between different organisations has been active, and CND supporters do engage in civil disobedience as well. The interrelatedness of different actors is apparent, as some CND supporters also acted elsewhere, regardless of inter-organisational disputes.

Scholars often divide the global nuclear disarmament movement into three waves. The first of them was born just after the bombings of Hiroshima and Nagasaki. In the UK, acting peace organisations such as Fellowship of Reconciliation and Friends for Peace condemned the bombings, showed their effects to the public and campaigned for control for both nuclear weapons and energy (Wittner 2009, 15–16). Similarly, the British government launched a secret operation that aimed at producing nuclear deterrence for the UK. As British scientists were already involved in the Manhattan Project, the knowhow was already available, although various contributing scientists began to oppose the development of nuclear weapons (Jones 1986). Due to the prime responsibility of “Western defence” in case of a war, the British activists were more radical in their demands than their American counterparts (Carter 1992, 46).

There are multiple explanations of the reasons why CND was born. Kate Hudson (2018, 32–34), current CND general secretary, refers to British government decision to test the thermonuclear bomb on Christmas Islands on 1957 as a trigger of organisation of several antinuclear actors. The public was contradictory on nuclear testing, as the 44 per cent did

not approve the tests as 41 per cent were in favour. Nevertheless, this is not the only reason that roots from the academic discussion. There are also interpretations that Duncan Sandys Defence White Paper, which practically discontinued nuclear civil defence, also played a role in a raising concern against nuclear weapons. Moreover, texts of George Kennan and J.B. Priestly, who published reviews on nuclear politics of the time, were catalysing nuclear anxiety in British academic middle-class. Also, the press was generally favourable on nuclear disarmament movement in its early years and published stories favouring the birth of the movement (Carter 1992, 46–7; Hogg 2016, 80, 86; Wittner 1997, 44.)

As a result, in February 1957, the National Council for the Abolition of Nuclear Weapon Tests (NCANWT) was founded, which gradually lead to the birth of CND when it collaborated with other peace organisations and included unilateral nuclear disarmament on its agenda. Similarly, CND created a policy statement including its main aims that required complete nuclear disarmament in Britain and also used its position on international arenas to forward nuclear ban globally. Notably, the statement did not mention nuclear energy in any form, although CND has decades later taken an opposing stand on it, especially after the Chernobyl accident. This opinion bases on safety factors and multiple common grounds in the technology that they share in the production phase, thus they tend to benefit each other, and it provides a logical continuum for activism. (Hudson 2018 36–38; Wittner 1997, 46–47.)

The popularity of CND soared in its early years. The first Aldermaston march in April 1958 was the event that raised the movement to the public knowledge and almost gained a synonymous reputation of the movement, although the march was firstly the initiative of DAC. Aldermaston was chosen as a target as it provided the nuclear weapons establishment. Different demonstrations became rapidly the distinctive way of protesting by CND, although it also participated in the high-level lobbying and other more conventional means of action. Even though CND does not declare to be engaged to any party politics, its connections to the Labour party are continuously strong. Especially the most conservative opposition of the movement has often dubbed it as a communist and pro-Soviet. (Hudson 2018, 46–56.)

The most notable attempt to criticise government civil defence plans in the first decades of disarmament activism did not come from CND. The Committee of Hundred, which was

composed by Ralph Schoenmann and former president of CND, Bernard Russell, in order to protest against nuclear policies by using civil disobedience more radically than CND did. In addition to numerous sit-downs and other mass protests that C100 organised, in 1963 the C100 based group called “Spies for Peace” emerged. The group investigated government’s secret bunkers designed for political leaders and administration and more notably, broke in RSG6 bunker at Warren Row. After the data collection, the group published a pamphlet called *Danger! Official secret* with 3000 copies and mailed it to several notable contacts in London. The reception of the revelation was a success in the view of nuclear disarmament movement, as it precipitated a crisis of confidence on defence politics and changed the public opinion on civil defence plans, just after the Cuban missile crisis. (Carroll 2010.)

Coupled with vast support on Labour and more radical leftist movements, the supporters of CND were and are usually middle class, liberal on their values and well educated thus they did not manage to gain working-class support (Carter 1992, 55; Wittner 2007, 227). In the beginning, CND was a youth movement, as students made the most of its membership. Today, the age pyramid has tipped. Those who have been in the movement for decades form a majority of members. In addition to local groups that were the backbone of the organisation, different demographical, religious and ideological specialist sections inside the movement were born, such as Christian, Labour and Youth CND. These sections have their separate membership, although their policies harmonise the core values of the movement. Despite its first years, CND was seen as a radical movement as it reflected the boost of the new youth culture of the time. (Carter 1992; Hudson 2005, 163.)

After the turmoil until the late 1960s, the movement declined for a moment. It rose again when the international limitation treaties such as SALT were on the tables of superpowers and had its second wave on the 1980s. The new rise was a result of the emergence of the conservative party and Margaret Thatcher’s power politics, which lead to the launch of the Trident submarine missile system. CND especially criticised Thatcher’s close relationship with Ronald Reagan and eagerness to bring US cruise missiles into British soil and enforce bonds with NATO (Cooper 2017, 128). Similarly, as HMO published Protect and Survive civil defence materials, the Peace Movement gained its momentum on the campaigning for the facts on the impossibility of nuclear civil defence. As I discussed above, similar earlier presentations of disaster education exist (McCutcheon 2007), Protect and Survive seemed

to have a tremendous cultural impact on the public view of civil defence, which facilitated an arena to ridicule HMO's preliminary plans.

The 1980s was a busy time for the nuclear disarmament movement as the focus transformed within technological development from thermonuclear weapons to cruise missiles women's movement for peace was gaining popularity. In 1981, Women's Greenham Common Peace Camp in Royal Air Force station was established in 1981 by Welsh group Women for Life on Earth to present the threat of nuclear weapons for everyday life. As a cultural space, this was highly controversial, since the camp can be portrayed as a discursive dissonance when compared to present norms in the society. The camp collided a feminine private sphere of homes and the public sphere of politics, especially masculine military politics. That caused public reprehension of the participants of the camp and presented them in an unfavourable light in media, gradually leading to a spiral of silence. Despite negative media attention and censorship, the shutdown of the base as a result of INF treaty in 1992 is one of the most significant victories of the disarmament movement (Couldry 1999; Eglin in Taylor and Young1994, 239–249; Hogg 2016, 142–144.)

The second wave of nuclear disarmament movement abated when international disarmament treaties took place. The number of nuclear weapons begun rapidly decline in 1987 towards the end of the Cold War. The amount of national CND members dropped from 110 000 in 1985 to 70 000 in 1988. However, all of the local group members did not join the national organisation, while their estimated amount stayed at 130000. In April 1986, the Chernobyl disaster changed public perception of the safety of nuclear energy. The accident maintained nuclear anxiety and woke up scholars to scrutinise risks in the modern world. Although CND did not constructively participate in campaigning in order to share information on Chernobyl disaster, many other nuclear disarmaments groups globally saw it as a chance. (Hudson 2005, 161, 167–169.)

After the end of the Cold War, the discourse of nuclear weapons changed as the bipolar world order collapsed. NATO and the British government ended up "de-targeting" all the missiles planted in British soil, even though Trident remained in the UK (Smith 2011, 1395). The public interest of nuclear disarmament diminished, CND discussed over a possible change of its line; a question whether other than nuclear weapons should be included to the agenda of the organisation has been asked frequently through the history of the movement.

This discussion is in vain, according to Hudson (2005, 184). She states that nuclear weapons do not exist in a vacuum, as the global weapon industry is highly interrelated. Later on, in 1992, END, one of the most influential organisations during the Cold War, held its last convention (Wittner 1997, 408).

Despite the decrease of membership and the greying of the participants, the CND continues to protest against nuclear weapons in British soil. Today, Trident is based on four submarines, which carry eight missiles on board. The submarine-launched ballistic missiles (SLBMs) are made in the US and are ready to be used at intercontinental distances. As Trident at present is somewhat out-dated, a clear majority of MP's in Britain voted for replacing Trident with a very similar system in 2016. Even though replacement provoked a political debate, it seems very likely that the new submarine-based system will be operational in the late 2020s, again in collaboration with US weapon manufactures. The cost of the system will be 40 billion pounds. CND estimate the actual costs to be even higher. (Ritchie 2010, BBC 23th May 2017, CND 2016.) CND members continue active campaigning against British nuclear arsenal and keep contributing to the global disarmament also today.

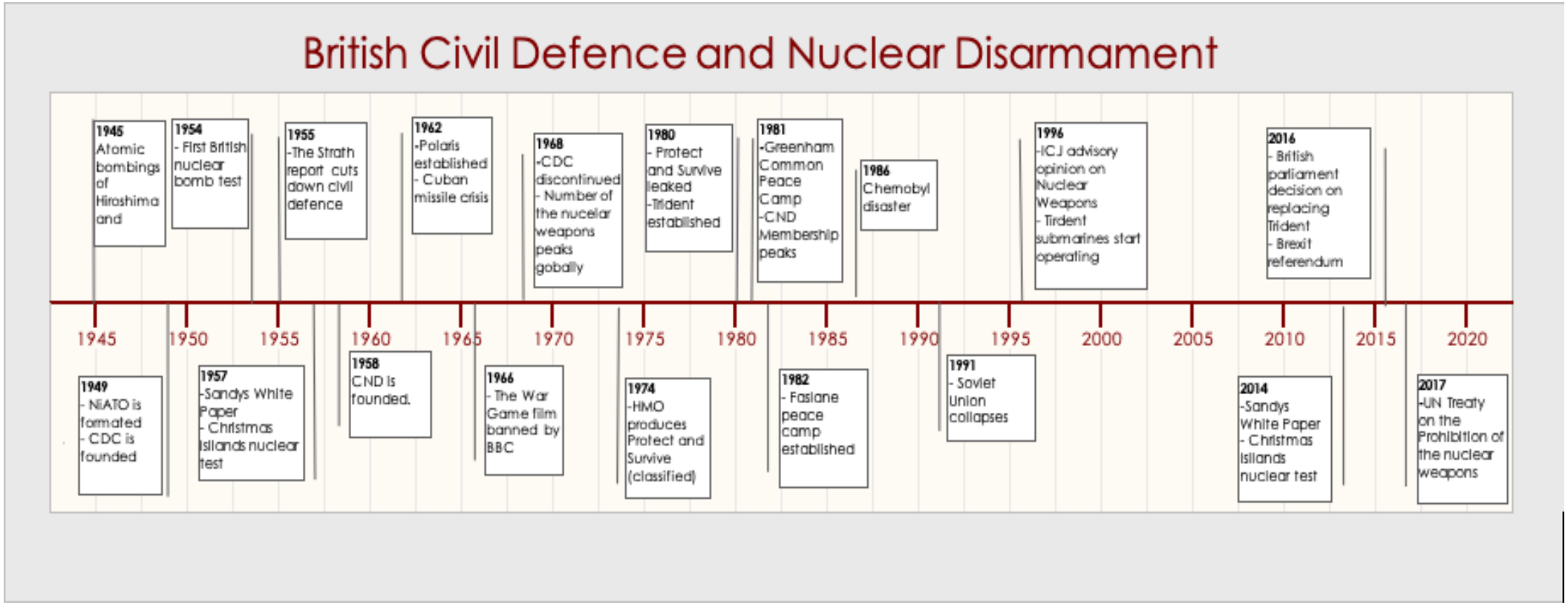

Figure 1: Timeline on historical events related to British civil defence and nuclear disarmament movement

3 Theoretical framework: Risk society and reflexive modernisation

3.1 Risk society – living with incalculable threats

Ulrich Beck (1994,5 and 1992, 29–30) defines risk society as a developmental phase of modern society in which the social, political, economic and individual risks increasingly tend to escape the institutions from monitoring and protection in industrial society. That is to say, modernisation itself produces these new risks when scientific development seemingly makes life in society more convenient and less laborious. This assumption of easiness has its price when the impact of a disaster would be impossible to predict fully before its actualisation. Beck claims that sciences' monopoly on the rationality is broken; for example, different consequences of an industrial ecological disaster could not be comprehensively taken into account.

Modern risks tend to globalise. The industrialisation has provided global interwoven chains of production, which allow transition of potential hazards among it. Likewise, some disasters tend to be "democratic" when it comes to the impacted area. Deforestation of the Amazon affects everyone globally to some extent, as it accelerates climate change. Similarly, a nuclear conflict would cause a nuclear winter for the entire planet while slowly diminishing life as we know it. Accompanied by the inability to comprehensive preparedness, imagined the outcome would be demanding to perceive, especially for those who are not experts of a particular field. (Beck 1992, 36–41)

Notwithstanding a global nature of global risks, the democratisation of risks does not make their consequences fully equal. The locals in the point of actualisation of a disaster still tend to suffer the most of its consequences. That results in the distribution of a potential hazard to create a new form of inequality when the vulnerability for modern risks dictates ta social position of the individual. This phenomenon globalises as well and shows when the most hazardous forms of labour relocate to developing countries, which also regulate the industrial hazards least. This distribution of "bads" for those who are most unable to protect themselves evolves from the class society, as the distribution of scarce goods creates social inequality. However, classes do not represent risk society accurately; the effects do not distribute evenly according to social classes upfront a disaster. (Beck 1992 39–44, Scott 2000, 34–36)

As I stated before, due to the complexity of the current industries, different systems require expertise to be maintained. That generates a need for a trust for experts who act as an upholding force of these abstract systems. This kind of expertise creates a new form of power where the experts are in a position to define the risks that the public has to perceive in the case of actualisation. As for specification proceeds, cooperation between different fields decreases, which profoundly makes prevention and preparedness for the hazards even more complicated. Although modernisation generally improves the quality of life, hazards of the new technology are still present, and when they actualise, the demand of the specialised knowledge grows even more as the incomprehensibility of t preventive efforts increases. (Beck 1992, 51–61, Giddens 1990, 88–92.)

Not all technology solely produces the growth of welfare. Military technology often harnesses breakthroughs of science, which has provided its productions to civilian use as well. This diffusion also existed before the modernisation (Digital trends, 2014), but has accelerated during industrialisation (Schmid 2018). The development of nuclear weapons and nuclear energy are the classical cases in point of army-based technology and often used to depict the ultimate peak of the human-made hazard, as their power of destruction is immense. The complicated reputation of nuclear physics highlights this, as it is concerned one of the most challenging forms of sciences in the world. I will later come back to this theme more in detail.

The societal approach of the modernisation considers that the risk society reflects the development of behaviour and construction of the identity of an individual. For example, the invention and availability of contraception create an opportunity to deconstruct the gender roles and shape family size according to the preferences of an individual (Beck 1992,103–106). Giddens (1994,105–107, 186–7) mentions that social roles such as gendered identities need a discursive justification when the tradition loses its power as a defining element of a community. The individualisation does not sweep away a sense of belonging to the community but rephrases new conditions to the issue. The concept of family changed from extended to nuclear along with the individualisation and the scopes of livelihood.

In conclusion, the risks of modern society are a result of the two symbolic endings; the end of nature and the end of the tradition. The end of nature does not mean that the natural environment would disappear altogether, but a drastic decrease in the natural environment

that is not affected by human interaction in a way or other. Nature is not anymore the uppermost force that decides whether we live or die. In contrast, humans are in concern about how human-made technologies have destroyed nature. Moreover, the end of tradition is defined by previously mentioned individualisation, as individuals have multiple possibilities to control their own life and potentially participate in expert systems in the society if they wish so. Culturally defined fates do not limit the lives of individuals anymore in the same extent it used to be, especially in Western societies. (Giddens 1999; Beck 1990, 62–98)

3.2 Reflexive modernisation – modernisation of the modern

Existence of risk society connects fully to the discourse of reflexive modernisation. Reflexivity usually views through the lens of societal change. Giddens (1990,19–23) states that social change to reflexivity is bound to disembedding, which is mainly defined as “lifting out” social relations from local contexts of interaction and their restructuring across indefinite spans of space-time. He illustrates this with an example of the invention of time measurement. As pre-modern societies were measuring time in relation to their environments, the invention and popularisation of mechanical clock enabled communication of different communities without knowledge of their local time measurement system. Disembedding allows different ideas and technologies to spread, which results in re-embedding, where they might lose their original meanings or purposes.

As disembedding evolves in different areas of life, it becomes more and more complex. Reflexive modernisation can be understood as “modernisation of the modern”. The first modern is understood to begin from the birth of the nation-state system and industrialisation. The second modern, in contrast, is characterised by globalisation and interconnectivity between states, which alleviates the borders. In other words, modernisation radicalises itself as the social change creates interconnected webs of knowledge and expertise and thus creates new forms of labour, economy and individual life. When compared to postmodernism, reflexive modernisation does not promote destructuralisation of current social science but the reformation of the current assumptions and social rules. (Beck, Bonss and Lau 2003.)

Beck states that reflexivity in this context does not mean reflectivity in society. The term refers to self-confrontation, which possibly causes the collapse of current industrial society,

as preparedness remain inadequate level compared to potential risks. That results in the birth of risk society and prevails deep intertwining of these two concepts. (Beck 1994, 7–11) The hyperbole of modernity forms immense unexpected risks, and the consequences for individuals are dependent on the level of safety and security they can receive. As I stated before, these create a backbone of social status in the society and similarly dismantles class-based division between societal groups. The birth of the reflexive modernisation relies heavily on the discussion on societal change, which has been a proficient source of classical theories of sociology. Moreover, the change itself generates new theories. From industrialisation and Marxist agenda to the Lyotardian postmodernism, Beck and Giddens link reflexivity to the tradition of social theories. Also, they mention Enlightenment multiple times, which seems to be a parallel event in history compared to the modernisation, although these two are also differentiated conceptually.

Risk society's stance on postmodern may also be scrutinised more closely. Beck claims on multiple occasions (1992, 1999, 2016) that postmodernism does not exist itself, but is the new interpretation of reflexive modernity. This view has not obstructed these two different approaches to coinciding in the research and forming an exciting dialogue of the nature of risks and their position in reality. As I presented before, civil defence is often looked through a standpoint of critical theory, thus combining the risk society and postmodern concepts, such as governmentality. Collier and Lakoff (2015) continue this tradition by presenting biopolitical reflexivity of risk society. As vital systems and vital population security that are under scrutiny by the theorists of risk society also the critical elements of biopolitics; they aim at fostering the population's health and wellbeing.

Also, the idea of governmentality may link with risk society. The idea of expert systems sometimes establishes high power in neo-liberal societies, and governmentality shows in the way risks and their potential consequences are perceived and presented in society. Forming those discourses of threat is a political decision, and thus it includes usage of power. It also defines the morale among citizens, as those who follow governmental instructions of avoiding risk enjoy the reputation of "good" and those who are not complying or even protesting against them "bad". This idea is especially impressive when it comes to civil defence and its critique by nuclear disarmament movement (Walklate and Mythen 2006, 13–14.)

Connecting the postmodern and late modern is significantly essential for my research, as I use critical discourse analysis as my method. As Chouliaraki and Fairclough (1999,16–17) state, the critical discourse analysis lands between theory and methodology, which makes it as an invitation of different theoretical approaches discussing in different discourses. That is why I do not approve only one interpretation of the modernity but aim at discussing different approaches of modernity and its epistemology on my analysis. This interdiscursivity allows me to join my thesis more tightly to former research on the topics.

3.3 Time and risk society

When discussing the naissance of risk society, typically Chernobyl disaster and other environmental crises in the 1980s are brought in, as Beck published his work right after the Chernobyl explosion. Beck (1992,10) argues that the modernisation and development of risk society escalated in the latter half of the 20th century. However, similar approaches have been present in literature before. Anthony Giddens (1990, 1) offers a crude approximation of the modernity to be the picture of the modes and ways of organisation of the social life in Europe on the seventieth century onwards. The political discussions in the time of the beginning of industrialisation support this. For example, philosopher Eugene Huzar provides very similar patterns of argumentation in the mid-1850s in the social discussion as Beck provides over a century later. New technologies then, such as preventing illnesses with vaccinations, building a gas holder in Paris and rail travel caused similar discussions of risks with minute probabilities and eternal consequences (Fressoz 2007, 333–340.)

Giddens (1998 20–35, 1999) states that it is crucial to distinguish the concepts of risk and hazard or danger from each other. Until the end of the Middle Ages, the concept of risk did not exist3 as it was not needed. That was mainly bound to the understanding of time; former societies lived mainly in the past. Giddens defines risk as actively assessed hazards in the relation of future possibilities. As modernity has divided the meanings of time and space,

3 Liuzzo et al (2014) define the etymology of the word “risk” followingly: *The word has probably two origins, and both are related to the concept of danger; risk might be traced back to the Italian word risco or either to the Spanish riesco, both deriving from the latin resecum (the one that cuts), a nautical expression used to define the cliffs which threatened the ships and any danger to sailors and naval trades. This etymology links the word to the sea insurance companies which used to be common in Genoa back in 14th century. The other possible etymology is linked to the Romance word rixicare (argue, debate, to put up a fight)*

risks have become a more critical part of our lives. One marker that tells the change of thinking is the birth of insurance systems, as they secure against the risks in the future.

Although the concept of risk society itself may be the alternative name of the phase called as a post-industrial society, its frequency on the public debate alters its societal timeframe. During the first coining of the term, a political concern of the pollution of nature, the new forms of technology in Western Europe in the 1980s and the end of the Soviet Union were prevalent themes in the academic discussion. Academia celebrated the sociologists who invented the concept. Nevertheless, the historical research challenges the view of radical change and offers the risk society continuity as a social phenomenon. Accelerating globalisation increases the risks and widens the impact of a singular disaster, but that is not inevitable such dramatic change as Beck suggests. Moreover, the overestimation of a meaning of the expert systems in that time gets critical feedback from historians; the risk society underestimates the economic powers. (Boudia and Jas 2007, 321–325.)

Beck was not the first scholar who discussed theories of risks in the social sciences. Mary Douglas (1985) has written on risk from the cultural point of view. When compared to Beck, she bases her arguments on the traditional composition of class society, the lower the status in the society, the more prone to risks individual is. However, Douglas also discusses modern technological threats and how their perception affects the public. As Douglas draws a picture of the public whose risk analysis does not meet with knowledge of the experts, she contributes to the discussion of the reflexive modernity. Although Douglas focuses more on the way how the community perceives risks, her toughs have surprisingly not discussed in detail in the theoretical framework of risk society (Elliott 2002). Especially the psychological impact and perception of the risk could be a valuable way to approach the topic, especially when the incalculability is concerned.

Even if the concept of risk society may be a portrait of its time, it is still theoretically valid today. Globalisation has escalated as the Internet has enabled fast communication around the globe; affordable tickets increase the amount of interstate air-travel year by year, and climate change is bringing its effects on everywhere in the world. In the time the concept risk society was established, Beck stated that the common writing of history has come to its end due to intensive individualisation. However, the current global crisis, climate change, has returned the meaning of global understanding of the development of historical events.

Beck calls this phenomenon “metamorphosis”, as it provides the new global unison viewpoint for the on-going change and the increases possibilities to have a shared narrative of the disaster, although the narrative is not internationally similar everywhere. The metamorphosis is not regulated in any way; Beck describes it to happen without any goal or direction. Every single choice or action affects it. (Beck 2015.)

Modern adaptations of this theoretical framework are not only restricted to climate change, although Beck uses it often as an illustrative example in his late work. As the risk society has gained status in a canon of classics, the adaptations of the theoretical framework has been multifaceted. As Beck’s original work address different risks in the reflexive modernity, has this viewpoint gained empirical testing of the theory both with the existing health risks (e.g. Wasserman & Hinote 2011), and the experience of risk, such as the fear of radiation from the mobile phone masts (Drake 2011). It is interesting to see how this theoretical framework will be applied to the empiric in the future. The COVID-19 pandemic has proven that the actualising risks have unpredicted consequences and that the trust for expert systems is significant when tackling global health hazard.

3.4 Risk society and nuclear war

Nuclear war appears as a hyperbole of the disasters that can be caused by the development of risk society. Development of nuclear technologies resulted rapidly to the invention of a hauntingly effective weapon of mass destruction (WMDs), which was contributing to the beginning of The Cold War. The war was something that sociologist could not predict at all, even though the development of different WMDs were in active development during the first half of the 20th century (Giddens 1987, 17–18, 1990, 9). Risk of nuclear war was considered to be a defining factor of the advent of the Third World War and destruction of current society, and the overall impact of the world would be impossible to predict in advance.

As nuclear technology and its risks have been one of the significant phenomena that coined the concept of risk society, the theory reflects well how the political processes around nuclear issues function. The same goes for reflexive modernity, as it emphasises the role of complex systems. However, the presentation of nuclear technology is sometimes overly sinister when scholars keep only theorising its impacts from the viewpoint of social sciences while completely forgetting to familiarise with the technological processes. That results in

the ambiguousness of the concepts of “society” and “technology” and the need for more specified analysis of different forms of nuclear technology. (Irwin in Alan et al. 2000.)

Regardless of the critical approaches on nuclear technology itself, referring to the inadequate understanding of technology should not be a reason to underestimate the impact of nuclear warfare. If nuclear weapons were used in warfare, both humanitarian and environmental consequences would be immense. By framing the existence of nuclear weapons as a rational choice to arrange defence and as a part of “everyday life”, their potential destruction force could be faded in the public discussion (Alan 2000). This contradiction enables multiple different psychological patterns, which help the individual to deal with stress caused by the knowledge of disaster.

Giddens (1990, 134–137) divides different adaptive reactions caused by living under current risks, such as nuclear war, to four categories. First, pragmatic acceptance is the most common way to react to potential risks, as individuals and organisations continue their day-to-day life similarly as before since own possibilities to affect the current state of hazards is somewhat limited. Arms industry itself bases its existence to this approach. Secondly, experts usually maintain sustained optimism in the system. That is characterised with staunch faith of continuous development, nonetheless the risks the new systems produce. The belief of the nuclear deterrence as a working and harmless defence mechanism is also rooted in this approach. Thirdly, in contrast to sustained optimism, cynical pessimists presume that the current system is destined to fail at some point. Although it is not entirely doom-laden or indifferent, it results in the depressing worldview of the current state of reality. However, it offers a valuable tool to scrutinise the current situation and its most significant issues critically. Finally, the fourth group are the radical engagers, who act to change the current system actively. This attitude is required for the foundation of new social movements, as it assumes that individuals are capable of changing the system. A case in point it the peace movement and its members, which protest against nuclear systems.

The excessively optimistic trust for expert systems is also confronted by Beck, who regards the expert-opinion based distribution of risk as “organised irresponsibility” rather than fully controlled position of power. Alario and Ferudenburg (2003) share this view partly by using the birth of nuclear weapons as an example, as their governance shows an interrelatedness of different expert systems while leaving some blanks in the case of actualisation. However,

they also maintain that the value of expert systems has to be seen in the management of nuclear weapons. As both Beck and Giddens regard that the transcendence of traditional divisions of power and values is one of the main elements of reflexive modernity, these features take a role a story of the development of nuclear weapons as the creation of the risk of eradicating existence of the humankind.

3.5 Peace movements – a result of reflexive modernity

As I mentioned above, modernity itself reforms warfare by producing new military innovations in the field of technology that create a wave of opposition. Also, the position of peace movements to be a wave of protest against new inhumane technologies, Giddens (1990, 159–161) regards them as a mean of the public to control and comment the means of violence. By mirroring the high-consequence risks associated with the outbreak of war, peace movements raise awareness of the risks in general. Giddens raises the nuclear disarmament movement as a sphere of this battle in the late modernity. Moreover, the peace movement has an international dimension in its presence, as it comments significantly internationalised risks.

Beck and Sznaider (2011) define nuclear deterrence and non-use of nuclear weapons as “reflexive taboo”. The universal consciousness of the state of victims in Hiroshima and Nagasaki caused the formation of the taboo. Nuclear disarmament movement was one of the most effective actors in order to provide information on the destinies of the victims and thus be the major contributor to the creation of reflexive taboo. Although the Beckian interpretation of the birth of the peace movements could go along the development of individualisation, it does not remain without political power and ability to affect development.

Peace movements tend to support universal values based on universal goals, and thus it is assumed that their members typically identify with cosmopolitan values. Nick Stevenson (2002) agrees on this logic and adds that the cosmopolitan view increased significantly after the Cold War ended due to a change in power distribution. The importance of civil actors, such as NGOs, has been on the rise, as they provide public space to construct individual identities. Stevenson raises the ideas of E.P. Thompson as an example of reflexive cosmopolitanism in the peace movement. As Thompson regards democracy, human rights

and ecological survival to be common interests of people on both sides of the Iron Curtain, he maintains that these values are globally acknowledged.

3.6 International relations and risk society

The field of international relations is also making its interpretations of risk society. However, the consequences of the development of modernity are overlooked and are kept at the margins of the field, despite the risk analysis being the most important analytical tool in modern society (Heng 2006, 69, Jarvis and Griffiths 2007). Moreover, the definitions of the nature of the risk vary among the different schools of IR. According to Clapton (2011, 289, see Dean 2010,207.):

Critical realists suggest that risks are real and exist 'out there'; constructivists maintain that risks are social constructions and that what matters is how social norms and intersubjective meaning shape actors' perceptions of and responses to risks; and post-structuralists argue that risks are not real and that representations of risk are a method of applying particular governing techniques to particular issues.

Although climate change and environmental risk remain on political agendas, the risk of terrorism has become even more prominent part of modern political discussion. Notably, 9/11 and the War on Terror have shaped the understanding of risks. As terrorism often appears unexpectedly and the impact of the strike is difficult to predict, the theoretical framework of risk society describes well its threat and gains its popularity as an explanatory theory. Moreover, the practical value that theory has gained in the macro-level of global politics on the financial side. Beck himself defined his approach to risks as a combination of realist and constructivist one. This contradiction is explained by the risks themselves being real, but the cultural approach to them can be variable according to Beck. (Aradau and Munster 2007.)

Beck (2001, 35–6) also recognises the risk of nuclear war after the end of Cold War, and even maintains that risk has grown after the traditional power-trust –systems created by bipolar power structure have deteriorated. During the Cold War, mutually assured destruction (MAD) made the culture of predictability, even though risk management itself mainly depended entirely on prevention; actualising nuclear detonation in a civilian target would be extremely difficult to mitigate. The nuclear deterrence is often considered to be a powerful tool enough to prevent the risk. However, Beardsley and Asal (2009) have explored

that according to the International Crisis Behaviour dataset, a nuclear conflict could be possible – also against a non-nuclear state. What is more, this is even more probable setting than two nuclear powers attacking against each other.

Interestingly, discourses of terrorism and nuclear threats have combined and produced academic discussion on nuclear terrorism, which is strongly present today. These scenarios include the severe violations of IHL, such as explosive attacks on civil nuclear plants or “dirty bombs”. Again, these possibilities provide the pattern of reflexive modernity. Along with accidental disasters, the threat of deliberate destruction causes even more politicisation of the nuclear power also in civilian use, which adds the discourse of security along with the typical safety risk that existence of nuclear power plants creates. (Miller and Sagan 2010.) Adaptation of risk society in the IR follows its phenomena and trends of current research.

3.7 Criticism

In addition to the critical perspectives from history scholars, risk society had been criticised in the field of sociology. Elliott (2002) notes that the basics of the theory have remained relatively unchanged since its birth, although the principles of reflexivity demand constant change. Moreover, the theory seems to be missing psychological factors in how individuals react to risk. As Douglas (1985) has found before, the perceptions and reactions to risk vary rather much in different cultures. Although the risk society is seen to be an exclusively Western construct, industrialisation causes risks everywhere. Moreover, Beck’s description of the demolishment of the class-based system as a result of the establishment of a welfare state seems to be somewhat optimistic when it comes to current social problems. As Elliott states, the class society has not vanished. However, he notes as well that there have been significant changes in a way in which people perceive their status in society, but Beck’s forecast of the classless capitalism has not been actualising. As risk society seems to be somewhat utopian in the sense of the existence of predicted increase of equality, it does not model current reality that well.

As Occidentalism of the concept of reflexivity was already discussed on some extent when the concept was coined (Giddens 1990), the discourse has remained relatively narrow when it comes to the global nature of modern risks. The uniqueness of the Western development of technology is a somewhat limited approach to the issue, especially as the industrial

development is not just Western achievement. Moreover, in the neo-colonial perspective, the increase of risks in the Global South that enable the current state of living in the North are not fully taken into account in the theory. Additionally, the Global South has not remained similar to preindustrial society, neither it has not reproduced the first wave of industrialisation in the European model.

On the contrary of the Giddensian perspective that risk society only limits to Western societies, Beck (2001, 2–4, 8) claims that reflexive modernisation is a global development trend and the outcome should be seen as unison globalised *world disk society.* He establishes the idea of pluralised modernity, where the paths of modernisation diffuse and creates multiple different realities in different parts of the world. Despite the division of different traditions, Beck assures that the lines of development all follow a similar path, which contains the rise of welfare in the cost of distribution of risks. This development is mainly present in ecological risks, as their actualisation would cause consequences globally.

In its unifying simplification, Beck's theoretical approach to culture is minimal. Heiskala (2011) presents it to be in a similar level of knowledge than the crude theoretical frameworks from the 1960s. However, Giddens (1994) contributes a more complex cultural approach on *Reflexive Modernisation; the* whole picture remains rather simplistic as Beck defends his view of a cognitive and individualistic culture. Moreover, when it comes to the historical Lyotardian perspective of reflexive modernity, the production of entities of "traditional modernity" and "post-traditional modernity" create only a way to tell a narrative on a significant social change; thus they would just be explanatory mediums that seem to have blind spots as well. This same unipolar cognitive approach is also criticised by Lash, who is also one of the founding fathers of reflexive modernisation. Majority of his criticism focuses on aesthetical and methodological issues, but the cognitive approach seems to be the central concern of his criticism. "Cognitivism" includes in his classification also realist, objectivist and rationalist sides of the theory as well. (Styrdom 1999, see Lash 1994.)

Conclusively, the problems of theorising risk society seem to forget power structures and how they can steer the distribution of impact when the hazard actualises. Remembering this is particularly important when reflecting civil defence and realisation of nuclear threats. Although ground zero of nuclear explosion would be equally destroyed and the distribution of risk is the major dividing factor of classes like Beck's theory suggest, it is still somewhat

limiting approach when compared to the globalised inequality. Moreover, the concept of social class is still strongly present in Europe as well. Cainzos and Voces (2010) found that especially in the field of politics class seems to remain as a significant factor in Europe, and the impact of individualisation is not crumbling traditional systems. The second wave of modernisation seems not to be as radical as it was thought to be.

4 Methodology

4.1 Critical discourse analysis

I chose critical discourse analysis (CDA) as my method of study, as it allows me to scrutinise different power relations that are apparent in my data. Term “discourse” is often defined rather vaguely, as the nature of the term is not definable itself. According to Norman Fairclough (2010, 3), discourse is not a simple entity that can be defined independently, as it is always a set of different relations. This argument also creates the relational baseline on CDA. Moreover, the meaning of discourse varies in various academic fields. Linguistics regard discourses as text or speech itself. At the same time, social scientists often define it more as a theoretical approach that is related to the perception of knowledge represented in the data. These two fields are often utilised in interdisciplinary dialogue when discourse analysis is applied as a methodological framework. (Luukka 2000, 133–5.)

As the expanded definition of the terminology indicates, discourse analysis is widely used as a method and includes various subcategories that differ from origins. Although all different forms of discourse analysis share a strong data analysis-based approach, they vary, for instance, with the different approach on knowledge. In the field of linguistics, first notions of critical discourse analysis were seen in the late 1970s, when linguistic groups began to analyse how choices on grammar and vocabulary may produce ideological connotations. One of the earliest groups with critical standpoint was Critical Linguistics of East-Anglia School, who was the first to combine critical elements towards society on their analysis of language. (Locke 2004, 27; Chilton 2005, 19–21; Pietikäinen 2000, 194).

Meanwhile, social sciences faced The Critical Turn, which was mainly facilitated by the Frankfurt school, especially Jurgen Habermas, and other postmodernists, such as Michel Foucault. Foucault’s archaeology of knowledge founded grounds for critical approach, where he defines ‘critical’ as an analytical endeavour to reveal the nature of systems, principles, rules, and values. The modern form of CDA was born in the late 1980s, proximity with the concept of late modernity. The most prolific scholars of CDA came from slightly different backgrounds. Fairclough found his inspiration in the work of Foucault, while ethnography and sociolinguistics influenced Wodak. Van Dijk, in comparison, combined linguistics with cognitive theories. These scholars aim to deconstruct the sociolinguistic forms of power. (ibid).

In addition to its transdisciplinary nature, CDA is a combination of linguistic and sociological critical approaches, as it examines the dialectic relation of language and society. Similarly, the interrelatedness of text and society defines this discussion. The production process of text often reflects the norms and values of society. Again, the text is acting as constructive catalysts, as it has the power to change society itself. This dialectical element one of the key nominators of CDA, as it investigates the relation of the textual construction of society. Fairclough sees this dialogue between text and its environment as the birthplace of discourse, as discourse cannot be perceived without taking both into account. Moreover, this dialogue characterises intertextuality, which refers to citations and variants of pre-existing text that are included in new cultural products. Intertextuality creates a network of different texts that communicate with each other. In addition to sociological and linguistics approach, CDA can be linked to various other disciplinaries, such as anthropology, history, and psychology. (Fairclough 2010, 3–4; Pietikäinen 2000, 196–7; Van Leeuwen 2008, 10.)

When compared to other forms of discourse analysis, CDA leaves a narrower path for reflection, as it has preconditioned interpretive approach to the text. CDA has a normative standpoint in a sense it pursues to find the discursive elements from the societal problems (ibid, 201). Riggins (1997, 2–3) states that CDA aims at “denaturalisation” of the discourse, as it invites to challenge it as an unchangeable element and question their position as neutral and apolitical part of the statement. However, the critical analysis does not only challenge the views that are laid by the producer of the text. Fairclough (2010, 7) makes a distinction between negative critique, which aims to analyse the social wrongs apparent in societies, and positive critique, which analyses ways how people tend to identify, prevent and mitigate wrongdoings. The separation between those two different opportunities to produce critical discourses allows me to examine my data from the standpoint where I agree with my informants with the impossibility of extensive nuclear civil defence and inability of the British government to produce adequate protection for its population.

There tends to be a list of preferred topics where CDA is the preferred method. These topics cover widely political discourses, for instance with economic and ideological themes, literature and media studies, education and other institutional issues, and topics that focus on injustice in the perspectives of gender or race. Academics often scrutinise all these domains from a perspective of power asymmetries, exploitation, manipulation and social

inequalities. This approach also gives a baseline for the analysis, which focuses on finding injustice from its first phases. Wide variance of topics is welcomed by most scholars, although some strive more on socio-semantic approach which adapts data collected from the field (Blommaert and Bulcaen 2000, 450–1.)

Fairclough and Chourliaki (1999, 2010) present the methodological approach on CDA, which avail presenting social wrongs in the four following stages:

Stage 1: Focus upon a social wrong, in its semiotic aspect.
Stage 2: Identify obstacles to addressing the social wrong.
Stage 3: Consider whether the social order 'needs' the social wrong.
Stage 4: Identify possible ways past the obstacles.

I use these stages as the basis of my analysis with necessary applications. Fairclough (ibid. 239) for instance, presents the fourth stage as a possibility to convert negative critiques to positive ones. As my data is already critical towards the issue I am raising, the need for conversion is not obligatory. As the methodological stages of CDA show, it has an aim to challenge and to some extent, change current social order as it pursues to identify methods to pass the obstacles.

As the significant scholars that have contributed to the CDA have similarly analysed the concept of late modernity, fits my theoretical framework well to my methodological approach. As these both traditions tend to focus on the social change in the system, they provide me with a broad platform to scrutinise the aim of the nuclear disarmament movement vis-à-vis government's civil defence plans. Fairclough and Chouliaraki (1999, 79–80) interpret the Giddensian view of late modernity through the Marxist lens. In this standpoint, globalisation and capitalism are deeply interconnected, and late modernisation results in mainstreaming capitalism, industrialism, surveillance, and state violence. As time-space –relation loses up, social systems that define productivity and forms of labour as well as social interaction present new constellations of power.

Power in the late modern can be understood as `transformative capacity' of social action. That also changes the opportunities of discourse, when new forms of communications occur. Moreover, disembedding of social relations from their particular contexts intensifies and disarrays them to new environments, thus creating global opportunities to discourses. This paradigm escalates detraditionalisation, as in a modern society traditions lack of explanatory

power. Withdrawal from traditional belief systems radicalises the modernity even more. This process is firmly bound to the concept of risk as risks tend to shift their form more in a way that social interaction is not adequate to prevent or mitigate them. Additionally, trust-based expert-systems give birth to new statuses of power for those who know how to avoid threats for safety and security and thus create the discourses that are understandable and available only for few. As different power structures reveal varied discourses, creates the expert systems a challenge for perceiving them. (Ibid, 79–83.)

Some discourses focus on excluding “others” form “us”, and these power structures are often in the centre of CDA. For instance, in my data, there is an existing myth of solitary “British population”, which has the status of a unit with coherent opinion. However, some people have been excluded from this group. Reflection of otherness in discourses can be seen as a method of denaturalisation, as exclusion is rarely a conscious process. These discursive processes of simplification and exclusion often tell more than just focusing on the prominent points in the text. In addition to otherness, the concept of self plays a crucial role in the discourses, as it defines how the producer of language perceives himself or herself. (Riggins 1997, 2–5.)

Paul Chilton (2005, 21–24) delivers a critique of CDA. Firstly, he addresses that CDA often claims to have an emancipatory effect for its subjects, and thus supposes to be a valid instrument for social justice. This claim is controversial in the sense that he cannot validate the affectivity in this connection. Secondly, CDA has dropped out from the developments from some of its interdisciplinary roots, such as cognitive linguistics, and while it is ignoring the newest studies of the function of human mind its status as scientific methodology stagger. He aims the third critique at CDA’s capability to provide relevant material for other fields, as its capacity to offer new approaches for its interdisciplinary roots are questioned. As Chilton’s view is strongly affected by his background in cognitive linguistics, this critique is not adequate when it comes to social sciences.

The discourse-based approach has been a part of nuclear questions in the research rather often, as nuclear weapons and energy cause a lot of political contradiction. For instance, Elizabeth Minor (2015) brings into light the humanitarian discourse on nuclear weapons, which the governmental communication often abandons, but which is very apparent in the activism. As the end of the Cold War has changed the political field, the view of nuclear arms

race has transformed from a necessity to keep bipolar world order to its place to more complex security issues. This transition may open the discussion more to the humanitarian impacts of nuclear war and thus change the discourse from power to everyday security. However, this change requires an increase in the interest of states to the humanitarian consequences of a nuclear detonation, which might be laborious as states claim that the deterrence is the only reason why nuclear weapons exist.

In the UK, nuclear power is also heavily criticised by CND, as it is intertwined with the production of nuclear weapons. Nuclear power plants often enrich uranium or plutonium, and as this is a military procedure, it is usually kept in secrecy from public. (CND 2018.) However, nuclear power shows climate discourse in the UK. According to CDA done by Julie Doyle (2011), the governmental discourse sees nuclear power as an essential method to mitigate climate change and produce “affordable and safe” energy to all households. Some organisations prove these claims untrue, such as Friends of the Earth UK. Nuclear power has a favourable reputation, as its discourse often presents it as a secure supply. This assumption is enforced with a xenophobic discourse, which ensures that nuclear energy will not be dependent on other states, unlike other forms of energy production.

4.2 Data collection

I collected my primary data by conducting face-to-face interviews across the UK from the 26th of February to the 5th of March 2019. Altogether, eight activists attended. The informants gave their consent to publish their names in the research, which I ensured by asking it before the interview. I began my journey from Glasgow, where I met Isobel Lindsay and Brian Quail, who are active members of Scottish CND and also supporters of the Scottish National Party. After that, I met Rosamund Ridley on Penrith, which is in Cumbria in Northern England. In Leeds, I conducted two interviews, firstly with Colin Archer, and secondly with Ruth and Bob Overy. I finished my research trip in London, where I interviewed Bruce Kent and Patricia Pulham, latter whom I met in CND headquarters.

I contacted the informants with the help of Finnish Committee of 100 and current CND chair Sarah Medi Jones. I received from The Teemu Tuominen International Crisis Management Fund of Tampere University Foundation to fund my research trip. I mainly selected my interviewees according to their availability and motivation to be interviewed. Moreover, I

wanted to have geographical diversity to grasp the local level issues on the civil defence in the UK, which succeeded rather well. However, I did not find representatives from Northern Ireland or Wales. However, the local issues were apparent in the interviews, particularly in Scotland, as the current Trident system is based mainly in there (Scottish CND 2013). Also, Bob Overy is a former emergency planner of the city of Leeds, which provided an interesting viewpoint from the expert level of preparedness and emergency planning.

I constructed the base of the interview on the semi-structural form and asked questions in chronological order. I selected the semi-structured interview as my data collection method as it allows my interviewees to share their expertise on the topic that they possess a tremendous amount of knowledge. Moreover, the method enables flexibility while covering the topics presented in the research question (Galletta 2013, 1–2). Also, there are some narrative elements in the interview questions, as I encouraged my informants to reflect their background on the topic as well. The interviews focused intensively on their personal experiences, memories and the activities they attended, or they still attend currently. Their personal opinions on civil defence were strongly present and attached to their experiences on the movement.

I focused on collecting their personal stories and opinions on the nuclear disarmament and civil defence and wanted to focus on the developments that happened in different decades along the waves of the movement and development of nuclear weapon systems. My informants have joined the movement in various reasons and times, which allows me to contemplate their motivations to activism. Despite these differences, the movement base seems to be relatively homogenous when it comes to ethnicity, socioeconomic class, age, and education. Most of my informants were retired; all of them had an academic background. This lack of diversity has previously been noted severally (Carter 1992), and even some of the informants commented it.

To design the structure of the interview, I used mostly Anne Galetta's book "Semi-Structured Interview and Beyond" (2012), which offers step-by-step guidance of presenting the different phases of the research process. The book helped me to craft the questions to the interview and spot the most important issues in analysing phase. When structuring the questions, I selected to leave my theoretical framework without explicit mention as I did not want to present my questions in a too prescriptive manner and give space for their interpretations

based on their experiences. I crafted my questions to the thematical order reflecting relations of the peace movement and those who were responsible for civil defence. I also added the element that would measure the international aspect of humanitarian law and protection with question number 5.

The thematical questions that created a structure for my interview were the following:
Q1: How did you get involved in the nuclear disarmament movement?
Q2: From the late 70s to early 80s, the nuclear disarmament movement was taking actions for Home Office's civil defence plans. How did you feel on the government's policies at that time?
Q3: Do you feel that the nuclear disarmament movement affected the government's nuclear policies or culture (films, books, music, etc.) at that time?
Q4: How do you perceive the current situation on nuclear weapons both internationally and locally?
Q5: Do you think that nuclear disarmament has common grounds with humanitarianism?

Moreover, I had some more specific questions for Bob Overy, as he has expertise as an emergency planner of the city of Leeds. The interviews were relatively informal and mainly followed the pattern described in the questions. Mostly my interviewees talked very openly and versatilely on the topic without the need for intervening. The discussions were recorded by Joonas Lintunen, who was participating in the interviews and sometimes stated specifying questions if needed. I briefed him to my research topic and research questions in a way that enabled him to be an active participant in the discussions. I used Descript application to transcribe the interviews, which ensures good data protection qualities. I also utilised Grammarly application to language check.

In addition to the interviews, I use supporting primary data in my analysis. For instance, each of my informants mentioned Peter Watkins's film "The War Game" from 1966, which was actively used by CND in movie screenings, as the BBC banned its presentation in television. Moreover, I involve the multiple representations Protect and Survive in the British media from the 80s to support the interviews. Furthermore, I will use some pamphlets produced both the peace movement and the Home Office. However, my access to these sources is limited. To restrain my material fitting in the scope of the research, and I focus mainly on the

interviews and findings that they prevail. I had a chance to get a glimpse of LSE collections on CND, but due to time restrictions, I was not able to conduct extensive archival work.

4.3 Limitations

The topic of my thesis is not extensively researched before, which means that there are further needs to discuss the matter in the academic field. Understandably I cannot cover all the existing gaps on research on the scope of my thesis. As I stated before, my access to governmental documents is minimal, which disallows me to understand the whole truth of the state of civil defence in the UK during different decades. The governmental information on my research is mostly relying on the academic literature, that restricts me to make my interpretations on it. Moreover, access to the documents on the CND remains also vague, as I did not have time for extensive archival work. The archives could bring the in-depth scope of the organisation and reveal the specific actions to inform the public on civil defence and its impossible nature.

In addition to the lack of access to the documents, there were no opportunities to gain expert knowledge on the civil defence. Although the impossibility of extensive civil protection in the case of major nuclear war is indisputable by multiple different sources (Grant 2010; Preston 2008), the existing strategies would add value to my analysis. That also exposes it to speculation as the government's tactic is often to remain silent if there is any kind of planning. Understandably, most of this kind of information is classified, as it might pose a significant security threat to the whole country if it is revealed. However, I have also blind spots when it comes to possible additional sources of information, which might result in neglecting some essential aspects of the topic. I try to prevent this by the exact formulation of my research questions and focusing on the personal experiences of my informants.

5 Findings

5.1 Depictions of nuclear war- disarmament movement versus the Home Office

In this chapter, I will examine how my informants see the different presentations of the nuclear war. As Jonathan Hogg (2012, 2016) shows in his work, the nuclear threat made its way to British culture in multiple channels, creating representations of actualizing risks. Speculative fiction has also been an essential tool for nuclear disarmament activism, especially when the government was censoring the films on the topic. On the other hand, Home Office created its visual instructions on the nuclear civil defence, including Protect and Survive, which presented the governmental ideal of the civilian action during destruction. These elements of nuclear culture created a vital part of the Cold War Britain, and continue to represent the cultural understandings of nuclear risk today.

Even though nuclear tests have been producing data how the nuclear attacks affect an exposed area, are the results of nuclear attack rather challenging predict in detail, as there are multiple factors in the explosion and its after-effects. Even these calculations can leave a lot of room for error. The report of the effects of nuclear war by US Congress from 1979 states that even in a minimal nuclear exchange, the impact will be immensely disastrous and cause multiple deaths, regardless of the efficiency of civil defence. The use of nuclear weapons also has devastating psychological effects for affected people, as the destruction is not only limited to the actual blast, but the fallout continues to cause prolonged suffering for the blast survivors and people in the area.

The films, such as The War Game, the blend of television drama and documentary directed by Peter Watkins in 1966, were actively used by the nuclear disarmament movement as a campaigning tool, and they certainly left their mark on the activism. As the comments of my informants present, the movement was actively searching suitable presentations to illustrate their worries. Moreover, there is a clear dialogue between the material published by the Home Office and the leaflets and events of the nuclear disarmament movement, as CND and its supporters borrowed the visual style and name of the Home Office pamphlets and animations in multiple different occasions. As the campaigns of the HO was not supposed to be published if the threat of war was not imminent, it presented the wholly inadequate preparedness level that was available for the citizens. After the leak of the campaign

materials of Protect and Survive in the early 1980s, multiple artists took it to scrutiny. (Stafford 2012, Hogg 2016.)

Although during the Cold War nuclear war was seen as a continuous threat and thus was more imminent in public discussion, the public has not entirely forgotten the topic. For instance, the meme culture on the internet continues the tradition of commenting on current nuclear policies and issues, and even “Protect and Survive” is still remembered and used as a source of parody. As these cultural events provide a continuum for nuclear culture and give a glimpse of current opinions on nuclear situation, I will shortly include them to my analysis to reflect the continuum of the discourse they are attached. They also show the impact of the changes in the pace and platforms of communication. The activists might also utilize that in the future.

5.1.1 Protect and Survive – The nuclear destruction and governmental viewpoint

My informants share unison opinion on the effectiveness and purpose of the Protect and Survive, as they seem to think that the campaign was built for HO to show that the government has plans for the nuclear war. They also seem to believe that they are not alone with their opinion, as they assume that the majority of the public does not see the pamphlet as a plausible method of civil defence. That is supported by the media presentations of the time, although it is not the whole truth of the situation. For example, the community of preppers endorsed the government’s civil defence plans, even though they did not trust them to be adequate when it comes to the equipment and protection in the real situation. According to Protect and Survive Monthly Magazines, this segment was somewhat disappointed with the government’s arrangements and was longing for the Swiss or Soviet-style nuclear bunkers across the country.

The cruellest part of Protect and Survive, it's at the end that says... You're listening? When you hear the all-clear, you may resume normal activities (…) Just like that. That's the most cynical and cruel that seems the absolute area is, which has been…
(Brian Quail 2019)

Marika: *Just basically, uh, for the Protect and Survive was launched because they felt that something needs to be done. Even though it doesn't really work.*
Bob Overy: *I think so. I think so. They probably were under pressure to show their faces to, to actually be seen to be doing something rather than hiding away. (2019)*

As these comments show, my informants see the Protect and Survive as the civil defence tool mostly as governmental façade to hide the complete incapability for adequate measures. This discourse could be named as *the discourse of distrust,* as the governmental attitude towards the risk of nuclear war can be interpreted as negligent and putting its trust for the deterrence effect entirely. These opinions are reflected on what informants think of the Protect and Survive and other government measures on the nuclear crisis. My informants seem to believe that the true meaning of the governmental civil defence measures is to cast the façade to cover the horrifying reality if the unlikely nuclear warfare actualizes. The distrust is also present on Brian Quail's notion of how the government practically makes false accusations how the nuclear exchange could be entirely survivable for civilians without extensive further damage. His statement also tells what the government assumes for citizens to know about the effects of nuclear war. However, the HO planned to distribute pamphlet only if the crisis seemed imminent before it leaked to the media.

There's no doubt about it. It was God's gift to us 'cause we just used it. And I still do use it because the present situation is, well… funky.
(Brian Quaill 2019)

I don't really remember very much about that. I think it was a campaigning tool, but we didn't do, um, let's see (…) Thank you very much (looks at the pamphlet). Oh, yes, yes. Oh, God. Yeah. Oh, I know what I remember now. Oh, it's a joke. Yeah. I'd forgotten. I thought this is one of our campaigns. Yeah.
(Bruce Kent 2019)

As my informants' reactions show, Protect and Survive was not seen as a serious effort by the HO to protect the citizens of the UK. As Bruce Kent first remembers, the material of the HO campaign even resembles parodical material that CND produced on their purposes. As I have already mentioned earlier, the nuclear disarmament movement imitated the layout and the name of the pamphlet on numerous occasions. Most known of these imitations might be E.P. Thompson's Protest and Survive booklet, which my informants also mentioned multiple times. Although Thompson independently wrote the pamphlet, it was a central campaigning tool for CND.

The response from the nuclear disarmament activists was not the only forum for the satire after the forced publication of the Protect and Survive in the 1980s. For example, the MAD magazine author Tony Hendra published an issue called "Meet Mr Bomb – A Practical Guide for Nuclear destruction", which mimicked the visual style of the pamphlet. Moreover, multiple tv-programmes used the Protect and Survive on their source of humour, as well as

numerous artists utilized the naivety of the campaign (Hogg 2016). This publicity benefited the CND and other critics of nuclear weapons and enforced the discourse of disbelief of the governmental actions.

In this discourse, my informants position the Protect and Survive in the ludicrous effort by the HO to facilitate the civil defence. This reductive attitude is, however, justifiable, as there are distinct grievances in the HO material. Moreover, my informants identify these deficiencies as the first comment of Brian Quail shows. While showing their knowledge on the effects of the nuclear explosion, my informants put themselves to the expert position compared to the target audience of the pamphlet. This role allows them to express critical thoughts towards the content created by HO from the confronting part, which is typical for social activists.

CDA highlights the ideological character of discourse. When looking at the peace groups perspective, the ideological tone is relatively easy to track, as they do not try to hide their political aims and critique towards the decision-makers. These contradictory opinions are present in the social actions of the CND and its supportive movements. As the Fairlough (2013, 11) states, social structures, practices and events mediate the way of abstract and concrete levels of ideology, and the nuclear disarmament movement is consciously using these all to disseminate its ideology. CND has a commentating role on public discussion, as its political power is limited, although some decision-makers support its actions.

The use of satirical elements in the campaigning material allows CND to indicate the most obvious flaws in government communication. However, unilateral disarmament feels radical to some portion to the public, thus causing them to see the measures that CND offers to be too drastic even though the governmental view of the topic was unrealistic. CND opponents often framed them in the Cold War dichotomy to the side of socialists, mostly because it consisted of middle-class people who voted for Labour. (Carter 1992). This positioning in society might have alienated some people and groups from the movement.

Marika: *How about, (...) were there any like campaigns for DIY kind of approach for civil defence after the Protect and Survive?*
Isobel Lindsay: *Not as far as I know. I think we would have picked them up (laughter)… and used them if they've been. But not as far as I know. They've got such a bad press. And I think if they tried this kind of thing, you would have so many comedians and satirical programs that I don't think they would risk it. They just decided that what they would focus on was...What was the arguments:*

"this is the only way to defend us that they won't attack us as long as we can attack back", you know, they would just focus on that and that they would use just the kind of primitive arguments that some for some people make sense in the context of you know, fighting the street or something like this.
You know without bringing into play the very nature of the the minute-by-minute decision-making that has to go on. And the guessing in calculation about other's motives in the context of nuclear weapons. (2019)

As a comment from Isobel Lindsay reveals, the activists believed that the government was aware of the counterintuitive effect of the campaign and thus stopped advisory related to nuclear civil defence entirely. This secrecy of the plans is continuing today, as the wartime preparedness solely focuses on sharing the information of the nuclear arsenal and its renewal. This approach is somewhat understandable, as there is no demand from the public for any kind of information from the state of civil defence in the country, at least when it comes to public discussion. This silence is beneficial for the renewal plans, as the nuclear civil defence often fits the role of a souvenir from the Cold War era.

5.1.2 The War Game and the other stories of nuclear Armageddon

Bruce Kent: *Well, the best, the best thing we ever had was a little film called the War Game by Peter Watkins. You see it, you should see it. It's perfect because it's about a little domestic town somewhere in Kent and um, they're preparing civil defence under the table, digging a hole in the garden, and then you have the explosion and chaos and so on. It's a very good film. Um, and it's well worth seeing now, even today, um, about the disaster of nuclear weapons. Um, so that was, that was the, one of the major instruments we had. In fact, when I became general secretary, we had about four copies of the War Game, and I spent a lot of time going to Euston station…. Yeah. Paddington station with a copy of the War Game 'cause we had them, something called the Red Star. You could, you could sign in a person to the railway and it could be collected in the other place. Don't think it exists now and I was taking the War Game and they would come back two days later, go somewhere else. It was a really good piece of publicity or propaganda for us.*
Marika*: What I understand, understood, the War Game was banned, uh, by BBC in one day. Well, why was that, what do you think?*
Bruce Kent*: Well because it's completely ridiculed nuclear weapons that are exactly what they banned it.*
Uh… But they released the ban, uh, after, uh, not 90, middle of 1980s. They stopped that, that because by then it was a public discussion itself. There was no point in stopping it, but they didn't prevent you getting it on 16 millimetres or something small. You could get it, buy it, but you couldn't have it on the television. (2019)

Somebody I knew... she as a schoolgirl took part in a legendary film called the War Game. She lived in Kent. She's a university teacher… or was. And she had to play somebody, it wasn't a speaking part, but she was an extra, playing that said this girl is pregnant and she, she was made up to be suffering from radiation sickness and saying that her unborn baby is already damaged and she may die before it… before she gives birth anyway…. It was a black and white film, well I did see it once. It's on TV years later.
(Rosamund Ridley 2019)

All my informants mentioned The War Game as one of the major media to disseminate the public on the effects of the nuclear war. The film was directed by Peter Watkins in 1965 and produced by BBC. However, it banned the presentation of the movie on its channels until the 1980s. The BBC stated the reason for the ban to be that the film was too shocking for "fainthearted" audiences, although the political motivations are relatively straightforward in this case. However, this BBC ban was not serving its purpose, as it raised the curiosity of the public, and thus the film gained popularity (Murphy 2000, Pilger 2006). The prohibition also attracted the audience for CND movie screenings.

Alternative presentations also fortify the discourse of distrust. Nuclear disarmament activists regard The War Game as a realistic option for presenting nuclear war. However, when looked at the current light, the description of destruction is relatively slight compared to the later representations of the nuclear war from the 1980's such as in the film Threads, which also presents the apocalyptic nuclear winter after the war. Moreover, the presentation of the war itself is more violent in Threads. This representation might also be a result of loosened cultural norms what is suitable to show on TV and the development of the special effects in general.

The War Game and other representations are building blocks of the British nuclear culture. Nuclear culture can be defined as the cultural changes in the art, institution, politics and society that have been caused by the technological developments related to nuclear science and technology. Hudges (2012) disputes the uniformity of the nuclear culture in one nation, as different actors interpret the effects of developing technology in their way. According to him, there are multiple different nuclear cultures, as the response of the play Uranium 235 from 1948 shows. The attitudes towards new technologies differ according to social class and political opinions, thus forming a prism of multiple cultures with different assumptions of the effects of nuclear technology.

Isobel Lindsay: *Well, I think one has to see the background of this. Remember this is not so long, after the Second World War. and there was quite a widespread including... Including June or cynicism about civil defence.*
In some places which have been hit directly by bombing during the Second World War then probably there was perhaps a greater appreciation of a room. I think in many other places there was the cynicism about what can we really do to help, it comes to the bit and this is just window dressing. It's just making it seem as if something can happen to protect you when in really and ...So there was there was that atmosphere around, and so I really don't think that cutting back on civil defence for anybody was really much bothered except those immediately involved civil

defence volunteers and of course, will you, are you aware now? I would think it would be the 70s that started first the comedy program Dad's Army.
Marika: *I haven't heard of it.*
Isobel Lindsay: *Oh, do that because they still do repeat. It was a very very popular UK white comedy program and this was about during the war, about this group of men and small English town involved as the Home Guard Unit Civil Defense. And of course, it was just farcical the things they did. Even at that time, I remember the authors of the comedy said they came under quite a bit of pressure here. Some people in the BBC was very uncomfortable about this because they thought lots of people are still alive, you know that period this is disrespectful, but in fact, it was a very popular show and people did recognize that were meant to truth. So, you know, it's worth having, having a look at that. Yeah, so that's the kind of background and...*
Joonas*: Just a short side note. We have had the Dad's Army showed in Finland.*
Isobel Lindsay: Yes. Yes. Yes, there were several series that ran for a long time. So people were in the course of the sixties, I think we're becoming more aware, considerably more aware of risk.

As Isobel Lindsay's interview shows, civil defence systems have been a source of comedy in a sitcom series Dad's Army. The representation of the pompous team of patriotic men setting up the civil defence systems during the Second World War. One of the most known catchphrases of the series was Lance Corporal Jones's "Don't panic!", which he shouted while panicking himself. Rhe Soviet jokes on civil defence repeat the same thematic of utterly staying calm whatever the circumstances (Wittner 2014). Joking on civil defence enforces the idea that governmental preparedness is not adequate, and the request to remain calm by the government officials is somewhat misleading. These elements are well integrated into the discourse of distrust, as the public authority is not offering enough protection in the stage of emergency.

5.1.3 Risk society and discourse of distrust

As Giddens (1990) presents, peace movements create a criticizing counterpart for the governmental, military forces in the reflexive modernity. The discourse of disbelief highlights this function, as the nuclear disarmament movement encourages the public to critical thinking when it comes to simplistic instructions. On the other hand, those representations that nuclear disarmament movement regards as valid, are mostly fictional. However, the directors and other creators usually are rather well acquainted on the effects of a nuclear blast and what happens after the detonation. Meanwhile, these pieces of work typically demonstrate how layperson's knowledge of nuclear weapons is minimal, and even if they followed the government's guidelines, the result is devastating. This notion is one of the key messages on the nuclear disarmament movement when it comes to civil defence and thus functions well as a tool of activism with the discourse of distrust.

The War Game, Threads, and When the Wind Blows are all showing how the public is somewhat unaware of the effects of actualizing nuclear risk. All these films depict people who trustfully follow governmental instructions and suffer horrible consequences when the protection of the measure is far from adequate. These actions also reflect the need for expertise and expensive technical resources on the protection of civilians in nuclear warfare, and how the lack of those make the civil defence impossible paradigm. However, the films, especially The War Game and Threads, also comment on the situation where the government officers are corrupted by their power and resources and begin to treat citizens unethically. In Threads, one scene shows that the government officers and engineers have died in their bunkers just some weeks after the citizens above the ground.

The interviews in the War Game also depict the understanding of the nuclear risks by the general public shallow. There are multiple scenes where the reporter asks various questions from the passers-by in the traffic while the fictional threat of nuclear war is getting more serious. Most of the characters are thinking that nuclear weapons are somewhat resembling the conventional weaponry and thus do not pose a threat for life. Moreover, as their knowledge of nuclear weapons is limited, the fictional interviewees are not estimating the danger of nuclear war that high. This estimation is prevalent despite the civil defence officers and police have already begun the actions to evacuate citizens from the major cities to the countryside towns and villages.

The scholars have made propositions regarding the name of “risk society”. Sørensen and Christiansen (in Gross 2016) propose the term “self-jeopardy society”, which in itself frames a reason for the hesitation of the governmental powers to contain the potential risks. Decision-makers are mostly ignoring the threat of a nuclear exchange, which reflects the reasons for distrust. By selecting not to confide the official sources of information, the nuclear disarmament movement is contributing to the fragmentation of the different realities, as it denies believing the governmental message. Furthermore, it also offers a solution to the problem according to the tradition of CDA. The discourse of disbelief reveals the governmental understatement of the civil defence measures. CND gives an option for lessening the risk with unilateral disarmament, which is not appealing for the decision-makers as it would subvert the country’s position in the international arena.

Social order in the risk society that maintains social wrong is the government's need for the inadequate knowledge of nuclear weapons from its citizens. That enables the government to keep its nuclear arsenal and justify its existence with its essentialness. By exhibiting the potential disaster, the nuclear disarmament movement and its supporters undermine the governmental credibility while offering the option for social wrong, as I mentioned before. I will return to this theme on the results- chapter, where I analyze this paradigm more in detail.

5.1.4 Discourse of distrust and modern representations of nuclear Armageddon

The discourse of distrust is still present on current representations of nuclear war. Even though the topic is not in active public discussion anymore, the relevance of the governmental possession of the nuclear warheads is still questioned. Protect and Survive has maintained its role as the source of the parodical elements. Even though civil defence is mostly disappeared on the conversation around nuclear weapons, the same characteristics of distrust are visible in current discussions. According to current events, nuclear weapons and their destructive force is still a concern for some members of the public, especially when the threat of nuclear attack is present in international arenas.

Although the senior activists of nuclear disarmament movement claim that the youth has forgotten the significant threat that nuclear weapons expose for the humankind, some elements show that it is not the utterly same accusation. I will present this more in detail in the next chapter. There are innuendos in the current media platforms that the younger audience is still aware of the destructive power of nuclear weaponry. The media of activism and communication have changed significantly. That might result in a gap of knowledge from the side of my informants. Therefore, I briefly present the current developments of internet culture and how they form a dialogue with the nuclear disarmament movement. As the youth mostly maintains internet platforms, they reflect their assumptions and analysis of the current topics, often trough extensively satirical filter. Different political campaigns use the Internet as their platform. The best-known examples of this are the Arab Spring and Occupy Wall Street movement, where the Internet and especially social media played a significant role (Jenkins et al. 2016, 3).

As the news cycle becomes shorter and shorter, ephemeral political clashes are easy to forget fast. For instance, in January 2020, the political turmoil between Iran and the US was followed by significant media very intensely. Meanwhile, the Internet burst with the "World

War 3” (WW3) memes, which were sarcastically commenting on the potential destruction. The threat of nuclear apocalypse is also strongly present on these memes, and some of them seem to have a glimpse of realism when it comes to the severity of nuclear war. However, as the nature of the Internet meme culture usually is, the parodic essence is visible, which transmits therapeutic function for their makers (Romano 2020).

Although WW3 memes are offering a channel to reflect the fears evolving from global disputes, they still not encourage upfront activism on the issue. They place the viewer as a passive position, who is not making an effort or have any power to change the events. That positions a viewer as a victim of organized irresponsibility; there are no ways or means to effect on current political situation on this position. There were no active mentions on civil defence, which might refer to the knowledge of its impossibility. Moreover, WW3 memes were trending very shortly, as the coronavirus was taking over the news. Meme makers themselves acknowledged that change, by making “meta memes” on the topic, such as comments on the quickly changing topics news topics that memes reflect.

Picture 1 & 2. Two examples of WW3 memes from the beginning of the year 2020 (source: Reddit). Picture 1 implies the maker of the meme acknowledges the impact of the nuclear blast while making fun of the possibility of the war. Picture 2 describes the fatality of nuclear war.

Even if the memes are not actively inviting people in the activism, they still have a function as political commentators and simplifications of opinions. The term “meme” was coined by

Richard Dawkins, who defined it as a building block of cultural evolution, spreading and evolving idea that produces variants of itself (Levinson 2012.) The internet memes are acknowledged to have a role in the everyday politics, for example in the Brexit referendum and the UK General election in 2017, and there were multiple visual humorous presentations of the candidates on the internet. Despite that, scholars, especially in the UK, often overlook them as a possible source of research data. (Dean 2019.) From the field of civil protection, the Protect and Survive pamphlet was also present on the Brexit discussions when the satire site The Poke published the pictures of the booklet. These edited preparedness instructions showed how to survive the after-effects of the EU separation, such as the economic depression (The Poke 2017).

Although memes have not completely facilitated a breakthrough in the field of International Relations, there are some signs that they are slowly gaining the role of valuable data. For instance, Saara Särmä (2016) has been analyzing memes in the form of collages. She points out that memes have a reputation of “low data”, which academics contrast with more serious “high data” that consists of more traditional and severe sources. However, Särmä points out that the memes portray the interpretation of everyday world politics, especially in the Western point of view. Although the memes form power constructions themselves, they are still offering a medium for those audiences that are not often producing the “high data”.

Memetic approach on nuclear weapons is not utterly new phenomenon. There are multiple different pictures and pieces of art from the glory days of nuclear disarmament from the 1980s which use similar rhetoric. Various sources have used the term WW3 since the early Cold War as a descriptive term of a possible nuclear exchange (Goertzel 1989). For instance, the CND-supporting photomontage artist Peter Kennard uses similar parodical semantics in his work, creating memes of its own time. CND is active on social media, and it professionally maintains its channels, the followers are mainly active on Twitter with almost 36 000 followers, while the other channels that are mostly used by youth, such as Instagram, are not that popular.

As the importance of social media seems to be growing in organizational communication, might that be the one solution for the recruitment of new members and continuing the culture of resistance. The representations of a nuclear attack are still part of the culture, creating the connection between the activists and new audiences. That might also translate as a

method for fixing the social wrong that misinformation of nuclear weapons and their potential destructive force creates among the public. The innovative approach by using new channels is vital for the movement to maintain its existence.

5.2 From local to global: movement strategy in reflexive modernity

In this chapter, I will examine the local nuclear threats that Trident system and its support functions cause and how the nuclear disarmament movement points out the wrongdoings in this spectrum. As the existence of nuclear weapons in the UK is closely dependent on the defence needs of other NATO members and especially the US, the political justification of Trident programme and its forthcoming replacement is bound to international relations. Meanwhile, the Trident programme and its administration have enormous local impacts to the communities across the UK. The Ministry of Defence estimates that there are about 30 000 jobs involving in the UK nuclear arsenal and its maintaining functions. However, CND presents that when the military positions relating to Trident are reduced, the civilian capacity working for the Trident system is only third of this number. However, some towns and areas, such as Barrow-in-Furness where the nuclear submarines are built, are currently highly dependent on Trident related jobs (CND leaflet 2016.)

Moreover, the risks related to nuclear weapons and their manufacturing localise in the UK. Currently, the nuclear base is situated in Scotland, Her Majesty's Naval Base Clyde, which is commonly known as Fastlane (Royal Navy Website 2020, Lindsay 2019). John Ainslie, a member of Scottish CND, made an extensive report on the potential locations for the Trident submarine bases in 2012. He concluded that Scotland is the only geographical location in the whole UK where the nuclear base can be situated relatively safely, and securely as other potential sites include substantial risks and limitations. As a result, nuclear politics directly interrelates to discussion on potential Scottish independency and its effects of replacement of the Trident system.

Nuclear civil defence was moved from the responsibility of the Home Office to the local preparedness authorities in the 1980s (Bob Overy 2019). This decision resulted in different political campaigns, such as the founding of Nuclear Free Local Authorities (NFLA) in different British cities and towns. NFLA not only stand for nuclear disarmament, but it also opposes nuclear power facilities on their areas. The main aim of the movement is to minimise nuclear-related hazards that city councils might face. Nowadays, there are around 40 councils that have registered as NFLA members around England, Wales and Scotland, which positively affects the discussion on civil defence and nuclear preparedness in general. (NFLA website 2020).

In this chapter, I will examine how nuclear disarmament movement problematises civil defence and other aspects of nuclear warfare at the different levels of the society, from local to global. My informants have all academic background and are well-informed in different actual crises involving nuclear threat across the world while they are also activists on their local communities. This combination allows me to apply the theory of reflexive modernity on my study, as the globalisation is an essential nominator for Beck (2001) and Giddens (2000). Moreover, the local political injustices related to nuclear issues are visible in the interviews, which provides a good platform for CDA. I will focus on the heart of the nuclear disarmament movement- the discourse of injustice. The main aim of the movement has always been to show the exorbitance of nuclear weapons and the effects of their usage, which I will analyse in different levels; from the communities to the local legislation. Furthermore, manufacturing and maintenance create risks that are less self-evident and more probable than what the actualising nuclear war could cause.

5.2.1 The case of Scotland – Localised threat in Faslane

Two of my informants, Isobel Lindsay and Brian Quail, are members of Scottish CND. Their expertise and concern on the local effects of Faslane base, Coulport storage and its additional risk-heightening activities, such as maintaining work of the missiles, can be well seen in their statements as I mentioned before, the pursuits of independence of Scotland position nuclear activism in the interesting political position. There are specialised peace groups, such as Trident Ploughshares, that are organising non-violent rejection campaigns around the UK. As Faslane base has become a monument of Trident missiles, a lot of demonstrations and other events happen there. For instance, the collective of peace activists called Faslane 365 organised different roadblocks to HMNB Clyde during years 2006-7 (Larkin and Tallents 2007).

Moreover, the tradition of the peace camps lives strongly around the naval base. Faslane Peace Camp has permanently stayed on its place from the year 1982, and thus it has been dubbed as the longest-running peace camp in the world although its current population is not very numerous. However, the campers symbolise insecurity as they remind the proximity of the danger in their presence (Eschle 2016, 2018). The direct action seems to be prevalent in Scotland according to my interviews, although peace activists practise it everywhere. The proximity of the threat potentially motivates to direct activism. Some interpret this as

“nimbyism” (Not in My Back Yard) (e.g. New Internationalist May 2007), although the worry of my informants seems to target also for the potential victims of British nuclear attacks, which might most likely situate across the globe.

As all the British nuclear force has been located to Scotland since 1998 (Chalmers and Walker 2002), it is understandable that the Scottish perceive the situation as unfair. Scotland is the home of the largest concentration of nuclear weapons globally, which makes this worry relevant in the viewpoint of local security. In addition to nuclear weapons, there are also nuclear waste disposal facilities, which increase the risk even further. (Scotland’s Independency White Paper 2013.) On the other hand, the HMNB Clyde is also the biggest employer site of all Scotland, as 7,5% of the Ministry of Defence personnel are working nearby Faslane (Phipps 2014). This composition sets the nuclear questions in the centre of discussion of Scottish independence.

Joonas: *What would be the destiny of a nuclear, nuclear base and Trident missiles? I've heard that that there's like not so many options apart from Faslane.*

Brian Quail: *John Inslane, who died two years ago, was the secretary of Scottish CND He wrote this book called Trident to nowhere to go. American experts, peer… peer-reviewed it. And they said it was actually spot on. There is nowhere else Trident could operate from other than the Coulport or that Faslane complex. You may think, they are submarines that you can still put wherever you want. Well, it's not necessarily seven carrying hydrogen bombs…(inaudible) neither space. It is the actually the base, the storage units should be five (…), five miles from the base. Coulport’s actually seven miles from Fastlane. That doesn't matter. So if you want to replace it, you've got to find a port that will take submarines and also have a place for hydrogen bombs within a five-mile radius. (…)(…) English seaside resorts that don't want to do that. All the nice little picturesque villages with a seafront, how many of would want that? Well, even if they wanted, he couldn't have it because the Coulport, the real reason why they Trident can't operate in scope out of Scotland in England.*
It's because of Coulport work, Coulport, the arms are operated there. They are deep, deep, underground as a mountain. You don't have mountains in England, there are no mountains you can put nuclear weapons. They chose that space. Chose Coulport to stand a first direct hit, frustrate with a nuclear weapon. That's why they choose it.
Yeah. there is no trip. Trident to has nowhere else where you can go. (…)(..), 200 hydrogen bombs within five miles of Portsmouth with the English people like that interfere to do it. You built an artificial mountain of stories. Would take them 20 years, so there really is nowhere else where that can go. So if we are independent, become independent, Trident is toast. It's got to go. It's got to be this mountain actually. It still is the problem. So we have a problem because the recite is seven old Polaris submarines just lying there quietly in rotting and weak cause they can't pin what to do with the radioactive waste.
The high level. They think we are very clear or(…)(...), anywhere far away. But the middle, intermediate level radioactive, they tend to want to do with this. That's why they're rotting.

Marika: *So it's really interesting. Because Trident renewal is going on? So it could be a good place to stop it at the moment if Scotland could be independent.*

Brian Quail: *Exactly Marika. Exactly. This is, they have not actually implemented although that they've already made the huge extension. Have you seen Faslane? The, the base has been greatly extended because all the British submarines will operate from the 2022 every summer nuclear as a political move to cement. (2019)*

As Brian Quail's statement shows, the Scottish independency and activism are going hand by hand. Both of my Scottish interviewees are supporters of the Scottish National Party (SNP) and regard the pursuit of independence as a powerful tool of disarmament. This "two birds with the one stone"-approach is not entirely new for the SNP, as their independency campaign promoted strongly demolishing Trident and the plans of its renewal. According to Ritchie (2016), the SNP utilizes identity politics in their discursive framing, where they juxtapose the Scottish "us" and "the other" from Westminster, which started to gain popularity during Thatcher's regime. This division is also present on Quail's deliberations on the current situation. According to him, the social wrong here may be the policy of the UK government to put Scottish people in risk when they are living nearby the nuclear naval base without full consent from the population. Meanwhile, English "picturesque villages" are a bit safer, as they do not have to live under the threat of local accidents that may occur when the warheads are maintained.

Richie (ibid.) continues that the discussion of Scottish independence is framed with the democracy deficit and colonialist arguments. In this viewpoint, The Westminster forces nuclear weapons to Scotland and the only way out is the local ownership of defence policies. Scotland is seen as internationalist, peaceful and advanced when compared to "imperialist" Westminster. The SNP is strongly supported by different NGOs and other civil society members because of this progressive framing, and thus the party and civic society are deeply interrelated. This connection may be the result of the matching pursued identities and a shared challenger when it comes to their goals, the government and current legislation. The place in the UN Security Council and the loss of the nuclear base are such significant losses for the government, that the independence of Scotland remains a vast question in international relations, as the following extract of Isobel Lindsay's interview present. It also implies that the disarmament movement has power in the party, which makes CND and other organizations' political insiders on decision-making.

Now one interesting thing that, of course, has happened in Scotland over the period is with the incidentally I joined the Scottish National Party in the late 60s and interestingly enough, I came across quite a lot of people who had been CND activists... To be awesome to have ...It wasn't a coordinated decision. People just joined individually. So this is the best opportunity because they

had given up any hope of the Labour party making the change or Great Britain because of the whole imperialist thing making a change and...
That has happened all the way through at the time of the referendum in 2014 to 16. Of course. This was one of the significant issues because the independence movement has always been the strongest anti-nuclear, and partly because, of the kind of people who joined it and partly because an independent Scotland has no interest in being aware and having a seat at the United Nations at least not having a seat at, having a seat in the Security Council in United Nations...
And this is something that greatly concerns the UK government because one of the things we did in Scottish CND was to produce a couple of research reports and one was "Trident nowhere to go". And if you've seen, you can access it online and it will, he has since died but our coordinator then who was a very good researcher had himself a military background, but he looked at all the potential sites in the UK where Trident might go. Well, first of all, there are very few often. It needs very deep water. It needs to be on the west coast, and it needs to be non-tidal, you know, there's all kinds of things and the... It does not suppose to be right in the middle of a city, you know where the submarines are, serviced down in Devonport and Plymouth.
Theoretically, if you make the Coulport part where the weapons are stored and you could have taken found most which is a related area just over the coast of the narrow strip of water that is a big tourist in Yachting Center you can you can imagine...
And the other part is pretty well in the middle of it and it's not only that but it took 14 years to convert the Polaris base for Trident. It's a big job and a very expensive job. And one other site in Wales is also the site of three major refineries in their major visibility, which is not good for equip. So basically there is no suitable site in England or Wales and ...where Trident could go and even if there was, it would take many many years in a vast amount of money to build it. And of course, people have come back and said oh but it will take years and years to get rid of Trident. And so we produced another report seeing disarming Trident. I'm going through all the stages and we made the point that knows you could make Trident non-operational in weeks.
All you have to do is require, if it's your territory, is to require the removal of the warheads from the missiles. Yes, it would take time to transfer the warheads, to do all kinds of things but you could make them non-operational very quickly and then fees are all addressed. So this is a big issue, you know for, for UK government and military and the Scottish government has... Is the one that has responsibility for civil defence through local authorities is supposed to take responsibility, and we have tried to kind of problem and, say: "produce your plans", mainly just to expose the inadequacy of any plans. But not very much really has, has come of this local authorities can say oh, yes, we have plans. If there is an accident or something happens. (Isobel Lindsay 2019.)

As the local authorities are currently responsible for civil defence and other nuclear-related preparedness measures throughout the UK, the risk related to possible accidents is framed here through the discourse of imperialism. Lindsay's comment shows that in the case of civil defence, the Westminster has created the incalculable risk to Scotland while not supporting the resources needed to protect people living in the high-risk area. Although the nuclear war would produce the risk of bombings countrywide, is the nuclear base indeed a prioritised target, as it would disable the nuclear defence, apart from those submarines that are outside the affected area. The Ministry of Defence indeed has an interest in protecting the base from attacks. However, if any collaboration exists with civilian preparedness planners and an army, the negotiations are kept behind the closed doors.

In the viewpoint of civil defence, Lindsay raises an essential question on the adequacy of current civil protection measures nearby Faslane base in the case of an accident related to the handling of the nuclear warheads. During our interview, she showed me a leaflet that the local officials distribute to the habitants of the Faslane area. The leaflet does not contain pervasive information on the measures that are needed to protect households during accidents, and it is distributed only in a very restricted area.

All in all, Faslane holds a significant position in the Scottish independence debate. The renewal of the referendum for independence would change the political landscape in the nuclear discussion. After the Brexit actualised, there might be a chance for a new referendum and pursuit for independence, as Scotland is rooting for the EU membership. The speculation of the effects of Brexit is particularly visible overseas in US and Canada, as nuclear-free Scotland would extensively rearrange the nuclear defence positions in NATO if Great Britain would separate (Munro 2017, Bridgers 2014, Overn 2018). However, rather optimistically, Scotland still shows signs that it would be willing to continue its NATO membership even after independence, although the nuclear disarmament remains one of the main targets of SNP (Richie 2016).

Even though nuclear warheads are travelling across the Scottish border to Barrow-in-Furness to Northern England, my Scottish informants were mentioning current forms of civil disobedience related to nuclear disarmament activities more often than other interviewees. As the nuclear warheads convoy through suburbs and villages in Scotland, the risk of accidents related to those maintenance procedures is raising concern on local activists. Brian Quail has made himself known across the country by giving a speech and then stopping the nuclear convoy by laying in front of it. Police arrested him for allowing the convoy to continue its way. Different newspapers frame the situation from varying angles. The Daily Mail (Campbell 2017) got the information related to happening mostly from the police and highlighted the inconvenience that the action caused for other traffic. Nevertheless, The National (Learnonth 2016) just wrote a small story and received its information from a fellow activist. This disparity reflects different attitudes towards disarmament activism in the political and geographical spectrum.

And of course, we are in a situation now, in which we have the transportation of nuclear weapons... They, as you may know, it is down in the south of England in Aldermaston Barfield, that you have per field is where the bombs are actually made. But of course, they are then stored at Faslane, …

Faslane complex and then they are put on the missiles... But they have to incorporate, they have to be taken from storage, fitted onto the missiles... And those who know about the technicalities of this, see that the reason why they had to put massive new large cement areas the year when we move from Polaris to Trident is… because Trident it's something technically to do with how the missiles are transferred, and the risks and Trident to seem to be a little bit greater or be more than in that transferring process ...And therefore the kind of theory and which you do it had to be expanded substantially and the store for the ...for the warheads.
So that is done here. But then, every now and then that this is maybe I think it's maybe half a dozen times a year, perhaps more...but some of the warheads have to go down to Barfield to be checked and serviced, and then back up again and this just goes by road. So you have these nuclear warheads such as been transported by road. And it's one of the interesting things, governments as a who certainly are the government
...I think greatly exaggerates the risks of terrorism in everything, except this. In which it tries to pretend it doesn't exist. And yet the farcical situation is that for many years now, there has been an organization, you can't have you heard of it. It's wonderful. Our people who for years started this to trace the transportation of these weapons from Barfield up and back down, and what is this a network of people. When they hear either at this end or at that end that convoy is moving, they get on the phone to other people. They come out and... And trace the, the movement right down point it's coming to various places.
Now, they've always been very careful here about not announcing in advance. In other words, this is for security issues so that they could not be accused of encouraging any, any risk. They may say in advance and the may say afterwards: "Yesterday in Paisley, there where nuclear warheads travelling through your streets", but they wouldn't say "the day before tomorrow nuclear warheads will be travelling through your streets."
But having said that, the very fact that crowd of amateurs year and year out can tell you exactly what's happening, where they will be.
You have to see if any half-competent terrorists want to and remember; they're travelling by night and day; at once at night to booby-trap. Some of the roads are very quiet lonely roads, want to booby-trap a road. Then, I don't think the warhead would explode because you know, you have to get certain things in the trigger mechanism, but the release of radioactivity would certainly be an issue there and yet government see nothing. (Isobel Lindsay 2019).

Isobel Lindsay's comment reveals the localised risk of globalised threat that has multiple dimensions both in local decision-making and international relations. Activists have been able to track the convoy transportation routes, which discloses the vulnerability of the transportation methods and at least some lack of preparedness and contingency planning. Lindsay raises a question of nuclear terrorism that has been discussed broadly in academia (e.g. Drell and Goodby 2003, O'Day 2004, Bellany 2012). This closer scrutiny raised after 9/11 attacks and war in Iraq, which combined threats of terrorism and nuclear scare, and has diminished until the current frictions in US-Iran relations at the beginning of 2020. In this discussion, it is crucial to map the prevailing discourses of rogue states and terrorists; the term "terrorist" is not unequivocal, and it reflects the attitudes of its user.

As Lindsay speculates, this kind of attack would have an impact mostly locally if it actualises. There are always operational warheads in the submarines, so the maintenance break would probably not significantly deteriorate the nuclear arsenal that the UK has, but would have

an instant deterrent effect globally. At the same time, the local people suffer from instant consequences, for example, leakage of the radioactive material. Again, social wrong translates as the unfair deployment of the risks, which creates a discoursive field of injustice. The Scottish people must live with the constant risk caused by their geographical location and the existence of nuclear weapons in the proximity of their homes. The Scots do not have a full possibility to influence the political decision concerning the nuclear hazard.

If Scotland would become independent, it could use its power to fix instability related to nuclear risks, although the defence policy needs to answer in multiple questions. Jens Stoltenberg has already stated that Scottish membership of NATO would not be renewed without an application process, which is usually rather lengthy (Allison 2019). Scotland is willing to continue to have shared defence forces with England and Britain (Saarikoski 2020), which would bring up many questions related to a nuclear arsenal and its placement. Moreover, as Scotland would like to remain as a member of the EU (Scotland's Future White Paper 2013), the membership would commit the Scottish defence forces to the Common Security and Defence Policy, while Westminster is not obliged to follow these rules and participate the activities and funding related to it if the Brexit deal is not notifying these aspects. Multiple security-related questions remain unanswered until Scotland decides whether it will hold another referendum. Meanwhile, Scottish nuclear disarmament activists continue their work to inform the public about the risks related to Faslane.

5.2.2 International Humanitarian Law and other nominators of injustice -a global perspective

Just when it was quite a name down again, but I remember his his critique, you see, was that they were very often in these maps that peace groups would... Show to the public with these concentric circles saying if a bomb dropped on Manchester, this is what it would look like and not just the physical destruction.
But the… the different distances taken, of course from, from Hiroshima and Nagasaki and you know scaling it up according to the more powerful weapons that now existed... And he said the problem with this approach is that it's the politics of fear. It's saying oh my God, we've got to get rid of nuclear weapons because they might kill us.
You know what the Russians might do. Was that kind of an approach and he said,
the real moral argument is not what they do to us. It's what we are prepared to do to them. What kind of human beings are we if we're prepared to destroy entire cities whole, civilization. And I thought- aha that is a very persuasive argument and it's quite different... So. "Save our city"-approach. I don't think that it was fully successful in transforming the way the argument was framed by CND and others.
Partly because it made political sense to make an alliance with the city council's all over the country, Local Authority leaders... To have a kind of a local stand to say "we at least will not

accept, you know, this this deception being, you know made in our name by the national government in support of nuclear weapons policy."
Essentially by sort of softening the public up to accept the possibility of a nuclear weapon strike. Ironically now, of course, everyone's worried about the development of mini-nukes which would potentially have if they were used alone, would have a more limited impact. (...) (...)
the problem, of course, is that no one can guarantee that a single strike would not lead to retaliatory strikes and then you know, a spiral of mass violence. (Colin Archer 2019.)

And then I began to talk about it and listen and, and then I realize that as... As a matter of ethics, it shouldn't, it is the same moral category to murder 100,000 people as to intend to murder them under any circumstances. (Bruce Kent 2019.)

All of my interviewees found some common grounds for humanitarian action and nuclear disarmament. Especially Colin Archer, who participated in the group that took the issue of nuclear weapons to the International Court of Justice (ICJ) is highlighting this approach. The ICJ case led to the Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons (1996). This opinion did not straight away deem nuclear weapons illegal as the rule of proportionality can be fulfilled in the various extreme situations when it comes to national defence over its existence. Moreover, according to ICJ the regulations and treaties set by the UN should limit the use of the nuclear weapons adequately The advisory opinion still left blanks to international legislation that resulted into the Rome Statute of the International Criminal Court (ICC) in 2008 when the government of Mexico submitted a proposal a ban for the use and a threat of use as a war crime. Although both of these attempts ended unsuccessfully, they brought the discussion into the justification for the existence of nuclear weapons in general. (Bersagel in Nyustuen et al. 2014, 221–2.)

ICJ's advisory opinion did not help to clarify the status of nuclear weapons when it comes to defining how the nuclear warheads are defined in *jus ad bellum* and *jus in bello*. The first is referring to the means that refers to the conditions under which states may resort to war or the use of armed force in general and latter is the law that defines the actual conduct of hostilities, which makes the term synonymous for International Humanitarian Law (IHL) (ICRC 2015, 8). Nyustuen (2014, 483–5) asks if there would be ever that kind of situation where the use of the nuclear weapon would fulfil the principle of proportionality and thus follow the *jus in bello*, even though the regulations could accept the usage according to *jus ad bellum.* As the UN has passed the nuclear ban treaty, it might be the sign of the changing attitudes. The lack of signatures from the nuclear states is filibustering the process, and thus they prevail the current power structures created by the possession of nuclear weapons.

The impossibility of proportionality of nuclear attack seems to form a deep core of the nuclear disarmament movement's existence. All my informants commented on the immorality of nuclear weapons. For all of them, the realization of how lethal and vast destruction they can cause was the major event that resulted from them to join the movement. This internal feeling of profound injustice reveals that my informants are all highly empathetic people, as none of them was mainly motivated by fear of destruction of their own home, but more importantly, they seemed to feel responsibility what the British army could do with the nukes. As Archer's statement shows, bringing up the horrors of nuclear war in the local communities was more of a campaigning tool for those who were more focused on their day-to-day living. That might also link to the discussion of the class society. As Ruth Overy's statement show, it is a privilege to be able to participate in activism rather than always worry about the family's income, for instance.

***Marika**: Well, how was public knowledge of the effects on radiation and nuclear arms in that time you started in the movement? Has that changed?*
***Ruth Overy**: It's a very good question. Cause I think we were still quite isolated from, um, a lot of people. We were spirit, we were, there was a lot of us. But, um, I'm trying to think of, because we live in, in a village full of people going to do their working-class jobs and they weren't concerned about this. They've been concerned about making an income and getting through the day. We had the privilege, like middle classes often do, of having a spare capacity in our lives to do it.*
So I'm not a clue really. I would imagine that most people were probably worried. Um, but not active, or actively worrying either, right? I think to be sort of support for us more than there would be. (2019)

The understanding of global politics and how it affects local communities all over the planet connects again to the idea of organised irresponsibility, where the ruling politicians are hiding on their shelters while the rest of the world suffers from the ultimate power game. All my informants show signs of worry about this political composition, which they have been following long during their active years in the movement. Although there have been some signs of progression, such as UN Treaty for Prohibition for nuclear weapons (PTNW), are my informants more or less pessimistic about the future, especially because international relations seem to fluctuate violently and new actors with nuclear weapons, such as Pakistan and India, are gaining their nationalistic movements. The injustice that is brought by nuclear threat has dispersed from the Cold War juxtaposition, as the Europe, Russia and North America do not seem like the most probable targets in potential nuclear exchange anymore. As the political stage and roles in it become more complex the nuclear politics is more

difficult to predict. The suspected possession of nuclear weapons has started wars in the Middle East, and this might spark conflicts in the future.

The disparity between legal and moral understanding also enforces the discourse of injustice. The authorisation of nuclear weapons bases on the reluctance of former major political powers to renounce their status. This power often turns them to outdated arguments. Meanwhile, the apathy towards the possible consequence of nuclear war is rising, as the public is seeing the political matrix around the issue too complex to debate on and they lack information on the situation with the nuclear weapons today. The shaping of public opinion has been a critical requirement for the success of the disarmament process, but lately, it has been challenging to achieve. (Lorenz 2018, Paxton 2019.) Coupled with the formerly presented distorted image of prospected success of simple civil defence measures and after that the complete silence on the topic, the nuclear states do not experience public pressure for disarmament.

As the nuclear war presents as “unsituated risk” to the public and does not offer ground to grasp, are the arguments for the employment factor easier to comprehend (ibid). When it comes to everyday topics, such as employment rate, people are more willing to see the direct and concrete effects of these political decisions on their lives and thus select to live under the risk. This chosen passive role, on the other hand, feeds the traditional arguments for nuclear weapons and sustains the risk. This vicious circle of silence diminishes the nuclear disarmament movement and creates the picture of it as a historical relic from the Cold War when the nuclear war was more prevalent on the political discussion and popular culture.

Passivity guides us to the core of risk society. Acceptance of an undetermined amount of incalculable risks in exchange of technological advancements and benefits, such as employment opportunities their maintenance is creating. Understandably, technological development creates more availability to nuclear weapons and thus make them attractive for the other than traditional nuclear states. As I have made visible, the nuclear weapons are not only tools for raising the status of the state internationally, but also the great nominator in the internal political identities of the country (Sagan 1996, Abraham 2007). These two political reasons and benefits they are bringing to the decision-makers are the primary reason why nuclear disarmament has failed. Giving up the achieved benefits in the

imbalanced and often surprising stage of the world politics in the name of solidary is an unattractive option for nuclear states, even though it means deteriorating the security of its nation.

5.2.3 Local authorities and nuclear civil defence – Preparing for the impossible.

One of my interviewees, Bob Overy, has made a long career as a preparedness coordinator of the City of Leeds. His interview gave me an excellent opportunity to have a glimpse of British preparedness systems and verified my suspects on the wholly inadequate measures when it comes to civil defence. That was not a surprise, given that the complete preparedness of nuclear attack has frequently infeasible from many different aspects. However, Bob Overy told that there were some functionalities, such as radio centres and bunkers that were mostly built for nuclear civil defence purposes but were not functional for sudden attacks. We also found the cultural differences between Finland and Britain when it comes to civil defence capacity.

These preparedness systems can also be analysed through the discourse of injustice. The burden of protecting the public during nuclear mishaps was loaded to the local communities, although the Home Office was seemingly helping the local authorities. Ministry of defence seems to prevaricate responsibility, as the deterrence is the selected method of the protection and trust for nothing happening seems to be high. Moreover, the founding of the Nuclear Free Local Authorities sent a message for the HO and MoD that some councils are not approving nuclear weapons on their areas and are not willing to cooperate with civilian protection measures with such an inhumane method of defence. This conflict reveals that the feeling of injustice is usual, and there is friction between different levels of governance.

Bob Overy: *Yeah. Okay. So what we're talking about really is the, the survival of home defence being run by the Home Office, which was what we've been talking about, you know, a joke, which this is the, the, the sort of, the last of flourish of the, of the joke grid, uh, were, uh, completely incapable, uh.*
What was the word? What I'm trying to say is that um, civil defence as maintained in, in Britain from the years after the Second World War had become less and less relevant. No. What has been developed for conventional warfare was completely inconceivable that it could cope or do anything about nuclear war.
Um, and so, um. CND identified that. And so, you began to get a lot of criticism of, of civil defence and people may make fun of it and just laughed and it was a gift, absolutely gift to the peace movement to, to have this as a target. But I need to say now, something now about the local government system in this, in this country. A civil… civil defence was a local authority responsibility 100% paid for by the Home Office. So, you had people, these old civil defence guys who were

working for the local authority, but they were paid for entirely by the Home Office. Um, so they had split loyalties and in fact, their loyalty was to the Home Office rather than to the local authority, um, in practice because, because they're all their peers were other people who were paid by the Home Office. There was a whole bunch of rockers. The whole country went, you know, with only all the, um, they had, uh, a radio system. There was a completely dedicated radio system for people who were operating civil defence, which couldn't possibly cope with. Now again, I'm not technical with the flash that you get from the nuclear weapon, it would have knocked it out.

Marika: *EMT*

Bob Overy: *Yeah. That's right. Yeah. Sorry. I used to know all these things, which just forgotten. And they mean they maintain that system at great expense. Right. Way up until I was working with the Home Office and I was arguing inside the Home Office. It's ridiculous. And then I discovered about two or three years after arguing that they had actually closed it down, but they hadn't replaced it with anything else.*
And so you, what you saw was redundant. System of, of, um, a pretence that home defence, it was being maintained over decades and nothing was going to change it. Um, local authorities you've got, it's very complicated, I'm afraid. You've got central government where you've got the Home Office, but then you've also got other departments that manage other things like the fire service and, uh, the police. And so on, which are all involved in, in, in responding to emergencies, including any nuclear war whom all needs to be coordinated.
And so that coordination is at a local level, but you've also got another tier of government about that. So you've got the home office, then you have, you have County councils or metropolitan County councils, and then you have below that district councils and in some parts of the country, emergency planning officer would be at the district level.
And other parts of the country, it would be at County County level. Um, and in this area, a County level, it was the West Yorkshire, uh, civil defence authority. Uh, and so they were loosely attached to the County council. And then you also had a district level. You had the Leeds city council. And there was a unit concern with that, with the civil defence at this level.

Extract of Overy's interview presents the historical aspect of civil defence in Britain. The home defence groups were terminated according to the Sandys Defence White Paper in 1957, as the paper admitted that civil defence against hydrogen bomb is virtually impossible (Grant 2008). The government started moving a project from the local communities to the HO, and the HO was keen to hire former home defence teams to these tasks later, as they were loyal to the Crown and other authorities and had been in similar tasks during the Second World War. These senior people and other preparedness coordinators funded by the HO were not all aware of current nuclear technology, and the restrictions that total nuclear war would cause as the example of radio communications systems shows.

Optimism in the preparedness work combined with challenges in coordination of the different departments of officials in such a grave situation enforces the idea of inadequate civil defence. Although the responsibility is theoretically with the HO, there are risks that ineffective coordination enforces the idea of organised irresponsibility, as the central

coordinator is not fully aware of the capacity of the local preparedness officials. Additionally, Protect and Survive and other campaigning tools that communicated civilians being themselves accountable for their protection if the nuclear war emerged, and thus created an atmosphere of denying the responsibility.

And they then, it was a declaration, declaration fund of Leeds was the first authority to actually talk about. A nuclear-free zone, but they didn't do anything about it. Manchester came along about two or three months later and got serious about about it, and that's where the nuclear-free zone concept within local government arrived.
And the basic concept was that we should do everything within our legal powers, uh, to remove the threat of nuclear weapons from our area. So we don't want to be cooperating or collaborating. With the nuclear system in any way, and we'll use our legal powers to deal with that. And so I found when I was hiring people to work with me, that a lot of people didn't understand that a local authority can only do what's legally empowered to do it, can't do what it wants to do.
So you can't just go out and say, we're opposed to nuclear weapons. You have to find a legal duty or illegal power. You'll get the difference between the duty and power. A duty means you've got to do, a power means you can do. Yeah. So you have to find bits of legislation. You can pin your actions against nuclear weapons to say, Leeds isn't using this particular power is now whatever.

So they, they realized that they could correct, um, start the nuclear-free zone policy within the civil defence policy so that the person responsible for civil defence could actually be antinuclear because the policy of the council was that, uh, it wanted to protect itself against nuclear war and it couldn't do it.
So, therefore, the only responsible position it could take under its legal duty to do something is to actually analyse what it could do and what it couldn't do. So that's where the nuclear-free zone concept sort of started within local government. And what gradually happened is that the old nuclear, sorry, the old civil defence officers who'd been working for years to Dad's army people who also had volunteers in the community, like Dad's army, and they would all meet regularly and train and do all these ridiculous things.
And there were little posts all around the country where communications posts where they could all talk to each other and I have to check it all out and make sure it was still working, that they were retired. I'll put it another way. They were asked if they would start looking at in Leeds that they would start looking at peacetime emergencies, or many of them said, no, peacetime emergency is not my job.
I'm paid by the home office to work on a nuclear war so they wouldn't do it. And so they all got retired and then they started hiring those that wanted to do it. People from peace movement who could develop a policy that was, um, opposed to civil to civil demands. (Bob Overy 2019.)

Bob Overy demonstrates here well the fundamental goals of Nuclear Free Local Authorities. By disclaiming the collaboration with nuclear-related planning and activities in the city council, the local governance can complicate the national nuclear weapons strategies. That is, however, somewhat limited mean to restrict the governmental decision. For instance, there are multiple NFLA members in Scottish cities and councils, such as Glasgow and Edinburgh are having pension funds that support the local nuclear industry in a way or other (NFLA Policy Briefing 195 2020). These indirect forms of support combined with high employment related to the naval base Clyde are transmitting a contradictory message from

the amount of real engagement on disarmament. Especially on the Scottish case, this leaves a room for the political situation with NSP and its declaration on nuclear-free Scotland. Even though the county councils are for the disarmament, many of the inhabitants are for them as their livelihoods are dependent on nuclear technology.

When considering the discourse of injustice, the administrative models with top-down hierarchies often play a role in forming the societal problems. The designs for preparedness systems that do not answer the needs, and they are designed far from the actual point of actualisation of the particular risk. This distance disallows to utilise the local response capacity of its fullest. Moreover, the foundation of NFLA reflects already the rebellion against commands from the national level. This kind of activism shows the frustration from the ignorance of local safety and security on the sake of holding the status of a key player in international relations. Although the public elects the MPs across the country from 650 constituencies (UK Parliament website 2020), the system does not fully guarantee that the multiplicity of local voices is heard in the national arenas. Ignoring the local needs causes discontent on the inefficiency of the local systems. This dissatisfaction is demonstrated through autonomous decisions and groups of local decision-makers gathering together, such as NFLA members and Mayors for Peace. At their best, these kinds of networks empower locals to raise a voice in their opinion.

The local awareness combined with governmental ignorance on a national level and conflict it causes might lessen trust for democracy and official opportunities provided by the official channels such as voting. Understandably, most of my interviewees are more or less engaged to different groups that practice civil disobedience, as it might appear the most effective media to inform the decision-makers of the local grievances. This approach is particularly useful when it comes to the risks that are invisible in day-to-day life. As Beck (2015) has proven, these risks are mostly invisible for those who are not aware of them. These risks are challenging to notice if they are otherwise linked to the improvements in the quality of life. Moreover, the secrecy around military bases makes the connection with everyday life instead fainted if the inhabitants are not familiar with anyone who is either working for one or knowing in one.

Although there might be disparities between the political motivations and memberships to the different disarmament organisations within the local authorities, the activism on this level

is crucial for the movement. The NFLA and Mayors for Peace ensure that middle management of the state government is aware of the risks that are related to the participation of the nuclear-related projects and actively oppose those to protect their citizens. However, as the previous subchapter presents, the local action to “save our cities” according to words of Bruce Kent, is not considering the threat it creates to others when the state is possessing nuclear weapons. The authorities are unveiling the possibility of ultimate destruction and thus governing with fear. As this is not an unusual approach for the nuclear disarmament movement, the approach of authorities is understandable, as it does not aim at hiding the horrible consequences of a nuclear mishap of any kind.

The complicated relationship between legislative power, civil defence and risk all bring out the elements that build the discourse of injustice. Ignorance on the impossibility for creating protective measures for the public, the attempts to facilitate them regardless of the apparent restrictions add into the discourse while keeping up the picture of survivability under the nuclear war. This concept is connected to the discourse of distrust I presented in the previous chapter, as it provides disinformation for the public provided by governmental actors. This ignorance creates the comfort caused by the lack of fear, and taking it away leaves some cognitive dissonance for those who do not have any reason for not believing the governmental messages. Coupled with the genuine preparedness arrangements, such as building up the bunkers and creating emergency communication channels, shows up in very unfair light.

My, I, I think now that most of the local bunkers who had nowhere near the capacity that they could've taken wives and children and all that, you know, that they were, they were literally horrible places.
Poorly looked after that had been where the places were reserved for people who had roles under the plan, you know, so they were the people who were going to manage. The, the, the recovery of the country after, after nuclear war. It's all complete nonsense, but that was what it was. (…)(…) Um, at one point, when the antinuclear movement within local government was getting very strong and we were using the arguments that we were legally obliged to do something that was impossible to do. And so, therefore, we wanted to figure out what it was that we could do and what we seemed to be able to do was actually to completely, it just points out that the all their ideas were unrealistic.
Um, they said, right, okay, you are legally responsible, every local authority is legally responsible for having a bunker, and it must have a bunker and you guys are going to have a bunker. And where we were going to listen to the deadline. And so suddenly around the country, everybody was suddenly having to sort of start and looking at the bunker.
So Leeds have had a look at its bunker, uh, which was just, uh, not far from here, about a mile away from two miles away from where we are now. And, um, so we did, and it was flooded. It was big, big structure. Uh, I was on a government site and it was flooded. I'd never been to, and it was flooded and it was damping.

It was awful. And, uh, so I was instructed by the politicians. This was .... To try and satisfy the Home Office to actually figure out how much it would cost to get it renovated. So I got the building control officer, who's a guy from a planning department, I think that just checks the suitability of the quality of building to go out and have a look at it.
He came back and he did a, an estimate and I was pushing quite hard and he did me an estimate. I think it was going to be 45,000 pounds or something to prepare. And I told my, uh. The chair of the committee cause I was responsible for a committee and she was absolutely horrified at how low the cost of renovation was.
As you said, this is completely unacceptable. He has to come back with a higher estimate. So he went out and he came back with a higher estimate and a higher estimate was 280,000 pounds. Now the Home Office was wholly responsible for paying for this. So we then sent that, that input that into the Home Office saying this is what it would cost to bring it up to quality.
And we never heard anything more from the Home (laughter) Office. So that was the sort of thing that was going on. (Bob Overy 2019)

Overy's interview proves that the measures that the Home Office took for the protection of civilians during the possible attack were rather feeble. As I have mentioned before, different levels of governance again disagree with adequate resources when it comes to civil defence. Moreover, the situation describes nicely how the higher governmental authorities would like to have fully operational protective bunkers but are not ready to invest in those, as they were expensive to maintain. This tactic also indicates that the HO officials were aware of the façade that nuclear civil defence is playing, as the mitigating measures after the attack would be even more challenging to predict and arrange. The reluctance for procuring or funding proper systems and leaving the responsibility on that for local authorities tells that the HO left the preparedness on the half-way.

Another interesting point on the British preparedness systems, especially when compared to Nordic ones, is that the individual is having way more responsibility than the society when it comes to civil protection. For instance, Finnish legislation (379/2011, chapters 10 and 11) requires rescuers to be trained to civil protection according to Geneva Conventions additional protocol 3 and every new building to have a shelter that can be equipped for civil protection purposes in 72 hours. Within our discussions with Ruth and Bob Overy, we found out that there is not an equivalent system in the UK. The responsibility lies within the individual itself when it comes to protecting themselves. To some extent, different compositions in the society and difference in the size of the population explain these divergences. Moreover, geographical proximity to Russia and lack of military support that comes along NATO membership most likely cause Finnish officials to prepare for the worst.

Even if Finland has relatively advanced civil defence mechanisms in the case of nuclear war or fallout (Martelius 2018), the preparedness is relatively futile when it comes to life after the blast. However, geographically there are more opportunities to evacuate people elsewhere, as the population density is very low outside the central city areas. In Britain, there is not this kind of opportunity, and the possession of nuclear weapons makes the island even more probable target for the nuclear attack. These differences make the British civil defence way more challenging and costly to arrange, and the motivation for that seems to be relatively low, as the probability of the attack remains low in normal conditions.

As I have stated before, nuclear civil defence is very challenging to arrange as the outcome of a nuclear exchange is almost impossible to predict in a boarder sense. The British context seems to frame it as even more demanding when it comes to arranging the shelter for every citizen in the densely populated island. This fact is explaining how the Protect and Survive and similar campaigns gained their inspiration. All of my interviewees saw this approach of civil defence as the measure to calm down the public more than an actual civil defence plan. Particularly during the Cold War, when the nuclear war was topical in the daily news and other channels, the demand for responsibility and protection from the public might have been more immediate. Moreover, the public interest on the topic has most likely pushed officials to act on this impossible challenge.

In Leeds, the local preparedness planning authorities focused on the more likely incidents and accidents, as the predictability of these nuclear mishaps is very low, and the protective measures very costly. Bob Overy also told that he influenced the national civil protection policies during his career and promoted more for local ownership and decision-making when it comes to preparedness in the counties. His approach is understandable, as the demands on the nuclear civil defence were impossible to fulfil with the governmental resources given for this purpose. This strategy may be the method to adapt to the prevailing conditions, while Overy's activism serves the means to address the social wrong related to nuclear weapons.

However, again, nuclear civil defence in Britain seems to fall under the organized irresponsibility. Decisionmakers in higher levels seem to be unwilling to invest enough to ensure adequate mitigation for nuclear disasters, and the public is unable to act to improve their chances for survival if the nuclear incident happens. This inability creates the space for political arguments for the deterrence effect, even if the existence of nuclear capacity also

creates strategical targets for the potential enemies. This contradiction is still prevailing after the Cold War, even though there are more nuclear actors than before and the risk of nuclear terrorism is currently notified more often. Preparedness planning does not have excessive leeway when it comes to a political climate that supports deterrence and is not favourable for disarmament.

5.2.4 Discourse of injustice – from local to global

In this chapter I have been presenting how the injustice related to nuclear weapons and inability to protect the population from their possible effects has been reflected in different levels of administration, activism and justice systems. As my interviewees have shown, the regional and global politics perceive injustices relating to nuclear weapons very differently. Even though these different levels are deeply interrelated, it is possible to identify a considerable variety of tones in the discussion on nuclear weapons. These differences are a result of political matrixes that enable the existence of nuclear weapons locally, nationally and globally.

For instance, in the case of Scotland, nuclear weapons have been taken as a tool for attempts of independence. Although the industry related to nuclear submarines and their maintenance is dispersed around Britain, the local risks and financial factors related to the naval bases is significant in the local political field. My Scottish interviewees had combined their disarmament activism for the hope for Scottish independence, and it framed the whole topic in a very different light compared to my English and Welsh interviewees. It was interesting to see the subtle differences in the local levels. Also, my interviewee in Cumbria and all the participants of Greenham Common told that they campaign local risks for the rest of the population.

As I present more in detail in the next subchapter, Giddens (1990) represents the peace movements one of the typical actors in the reflexive modernity as a counterpart of the modern military. As the military technology, in particular in developed countries, is usually the technological laboratory for innovations that trickle down to civilian use (Acosta et al. 2018), the concept of risk society fits particularly well to them. Moreover, the development of technology enables the evolvement of cyber warfare (Rozenzweig 2013). In the reflexive modernity, the peace movements take the role of the tribune, and they inform the public on

these threats. As a nuclear disarmament movement is a specialist on this task, the societal role crosscuts different political levels and requires activism in all issues that are involved in nuclear weapons and the risks they produce.

All my informants also adduced the aspects of the global injustice regarding the justification of nuclear weapons internationally. When it comes to international relations, nuclear weapons play a significant role in the showcasing power to other states, as can be seen in the UN Security Council. The states are reluctant to relinquish the benefits which are based on the post-World War II positions of the power game. This results in states deprecating the risks related to the nuclear war, meanwhile technology is evolving. Similarly, the variety in lethality and destruction that nuclear weapons can cause is growing. Coupled with the increasing political uncertainty in international areas, it is understandable that my informants were particularly worried about the global political developments and their possible outcomes.

Global injustice in nuclear weapons is presented strongly in the interviews. As the international acceptance by the nuclear states defines the moral right when it comes to owning the weapons, the population is somewhat unable to affect these unofficial conventions. Regardless of the UN Ban Treaty in 2018, the nuclear threat still exists, and the treaties such as INF are unravelling. Although my interviewees are doing their best to present these injustices to the public, the disarmament movement shrinks in membership. I discuss this further on the next subchapter.

5.3. Changing climate and Youth engagement- Nuclear disarmament and the future of social activism.

In this chapter, I will analyse the relationship between the nuclear disarmament movement and the new topics and forms of activism that focus on current risks, climate change being the biggest of them. At first glance, the relationship between climate change and nuclear civil defence might appear vague. Despite that, I find it essential to include this theme in my analysis. The nuclear disarmament movement has been one of the most important channels for the public to discover the inadequacy of the measures of protection during a possible nuclear attack. However, as the nuclear disarmament movement is concerned that the other social movements of our time are eroding their support, I see the closer scrutiny of the theme is warranted. The popularity of the nuclear disarmament movement also reflects how relevant the public sees the nuclear threat in the public discussion. As the theme surfaced in all interviews, the importance of the topic to my informants is apparent.

Another reason I found this theme essential to analyze stems from my theoretical approach. Ulrich Beck (2015) has discussed how climate change is a significant gamechanger globally, especially when it comes to risk. Beck presents the concept of “organized irresponsibility”, which he describes to be the state where the decisionmakers are not accountable from the perspective of those who are affected by the risks, and those who are affected have no means to participate in decision-making processes. Organized irresponsibility describes the political situation with nuclear weapons in the UK, albeit with some reservations. Trident is heavily dependent on the politics and manufacturers of the US, and even though British politicians cannot fully disclaim responsibility, the connectedness to world politics might make this approach appealing. A similar thematic is connected to climate change, which provides a fruitful ground for my analysis.

The third motivation to bring climate change activism and the nuclear disarmament movement together in the analysis is the current gravity of the situation concerning both risks they are addressing. The Bulletin of Atomic Scientists clearly defines the risk of a nuclear exchange and climate change as the two greatest nominators when it comes to the most significant threats for humankind (Bulletin of the Atomic Scientists Science and Security Board 2020). As these threats are both politically induced and intensely connected to human action, the activism around them resembles each other. In this chapter, I will

examine the interconnecting elements of these two social threats and how CND activists see the future of their movement.

5.3.1 Climate change vs. nuclear disarmament.

You get grants from here, dah, dah, dah, dah, dah… But you don't go into issues of war. So we just having now a big thing about climate change, but most of the profits of climate change now do not acknowledge that military production is a major factor in climate change. Yeah. We spend $2 trillion a year on war and weapons with the CO2 must be enormous, 10% or something, but it's not on the agenda.
So you get big organizations like Catholaid, Catholic fund for overseas development, uh, who will talk about climate change all over the place, but they don't make the connection at all with nuclear weapons.
(Bruce Kent, 2019)

The recurrent theme in my interviews was the changing focus concerning activism. It seemed that all my informants had reflected on the current public discussion concerning the risks of climate change. They were mostly happy that the youth had found a form of activism that channelled their concerns to the decisionmakers. However, they also seemed to be concerned that climate activism and topics related to social injustice are taking too much space from the discussions on nuclear weapons. As public knowledge of nuclear weapons decreases, the new generations are less and less aware of their impact and the gravity of the issue in current politics. I named these emerging themes as 'the discourse of the worry of forgetting', which could be read widely from the interviews.

We know that young people are very engaged with issues. I mean, look at the movements we've seen in the last couple of weeks the climate rebellion process, you know, like striving for… are leaving school on strike to raise the alarm bell about climate change.
So I think there's a kind of a radical dynamic amongst young people at the moment that just wants to engage with these sorts of issues.
(Patricia Pulham 2019)

Yes. It's interesting now to see, it's very interesting to see now if there's anybody who thinks that you would survive or want to survive a nuclear war. Yeah. But just gone out of consciousness because there's so many issues that are to, and yet it's just as dangerous now as it ever has been…Right. There's not international consciousness at all, I don't think is climate change and just general stuff has taken over and yet it's still there and it's still near misses. Interesting, isn't it?
(Ruth Overy 2019)

Youth activism is seen strongly in a positive light, as the comments show. The power of the youth groups is acknowledged, but the worry emerges from the target of the activism. The insufficient awareness of nuclear weapons is framed as a worry, as the nuclear disarmament movement turns grey. However, his concern is only part of the truth. For instance, Lisa

Carson (2018) cites the survey from 2013, which states that 91% of youth consider nuclear weapons to be inhumane and brings out the feminist perspective on nuclear disarmament, which some of my informants also found as one of the critical drivers of their activism. However, the opinion on nuclear weapons does not state how well the youth grasp the scope, impact, and the number of nuclear weapons and the possible threats that they cause.

When this is applied to the perspective of Critical Discourse Analysis (CDA), the steps in this discourse are rather multifaceted. The social wrong is semiotically wrapped around the existence of nuclear weapons throughout my interviews, but here the social functions become more contradictory. Although the informants perceive climate activism in a positive light, the concern of forgetting the nuclear issues still lurks in the background. The informants also give examples of how climate change and nuclear weapons are interconnected. The so-called fusionist approach mostly focuses on the nuclear winter and the short-term effects of the detonation of a nuclear device for the climate. This approach is somewhat amicable, as it would prefer the coexistence of these topics in public discussion.

I think that's the best way to think of it as a community of movements and at different times, different things come to the for this issue, you know had its time in the, in the 80s the legal issue had its time in the 90s. Now we have the ICAN wave, you know, so there's been many different ways and many different sub-communities who come to the fore and that's how I think how civil society often works. Yeah, climate change you could do something similar(….)

(…) I mean we can survive but will we prosper? In this time, you know, there's a lot of competition for especially younger activists' energy and it's going more into climate change, and migration, and human rights and some other things. But we do have this very rich history of campaigning, you know decades and decades of it. When it's done well, it's just marvellous.
(Colin Archer, 2019)

The value of climate change activism is also clearly recognized, as it shows the logical continuum of the chain of social movements in history. This view emphasizes the power of the social movements and their place in the world. Themes change, also inside the movements. For instance, the nuclear disarmament movement actively took part in protests against the Vietnam War, and its end led to decreasing interest in disarmament activities as well (Wittner 2003). The social movements under consideration seem to be strongly interconnected, and the nuclear disarmament activists identify themselves as being on the same side as the climate activists. Moreover, some of my informants had a background in other social movements, such as solidarity movements and international development coordination.

As I noted before, the fear regarding the future of the nuclear disarmament movement is somewhat apparent in the interviews. Since the Cold War ended, the images of the enemy have been changing on the stage of international politics (Herrmann and Ficherkeller 1995). The previous bipolar world order has changed first to the unipolar US-led world system and then to a multipolar circle where China and other possibly evolving Eastern superpowers such as India are raising their heads. This makes the nuclear situation and more challenging to the general public to follow the discussion and decide their side on a potential conflict. The most significant nuclear scare has moved from Western Europe to multiple different points of the world, such as to the Korean peninsula and the border of India and Pakistan. The narrative of the threat of communism has been replaced by the image of rogue states, whose nuclear status is often disputed (Homolar 2011).

I mean, it was amazing, but you know, up and down, up and down that the public concern is very fickle. It changes, you know, other things become important. And the crucial factor was the end of the Cold War. That's what made everybody sort of relax and say oh, well, it's all it's all over. There's no risk now.
Well, of course, it's not true. We still have tens of thousands of nuclear weapons and we have great hostility between all the powers look at the India and Pakistan just this week, you know, we almost nuclear war. I mean, it's terrifying and Trump and Putin and it's just awful. We need a really big protest.

But the action is now somewhere else. Climate change, rightly, is very important people mobilizing on that but not with hundreds of thousands. Internet has been a big factor in this change, you know, people do politics in a different way now. Yeah, it might… I mean there was the big demonstration against the Iraq War 2004, 2003, 15th of February, you know, probably the biggest demonstration ever anywhere. I mean worldwide 10 million people on the same day. That is something of a high point. I'm not sure, you know, if we will ever get that again, partly because of the way the electronic age disperses people's attention and people feel that they can, they can click on something. Yeah, you know, and it does something, they don't don't need to go and do it and then you say well...

We did that big demonstration and they still invaded Iraq, you know, it didn't work, you know, so we're struggling with, with big societal problems in a way in terms of how we can find a new, a new approach. Now back to the local authorities, as part of this ICAN campaign on the treaty, many people are trying to get local authorities to pass resolutions to say that we support the treaty. I have some doubts about it because, you know, local governments don't sign international treaties, it's national governments will do and there's not much that they can actually do about it. Where's with it with local civil defence policy, there's all sorts of things that the local authority has responsibility for any emergency planning, but this one doesn't bear much fruit. Many of the cities they're already anti-nuclear cities, they're already members of Mayors for Peace. So I said to people here. Well, I'm not I'm not terribly enthusiastic about doing work at that level.
(Colin Archer 2019)

The abovementioned developments have indeed had their effect on the nuclear disarmament movement and its popularity. As I presented in the literature review, the history

of the nuclear disarmament movement has three different waves of popularity according to the research, and public interest in the movement has fluctuated notably in the past. However, the last of the waves took place decades ago, which understandably raises questions as to the future of the movement. My informants began their activism in different decades, but they belong more or less to the same generation. As the number of young people is decreasing in Europe, the resources for activism are also smaller than they were when the baby boomers reached their adolescent years. Moreover, the focus of the action is shifting more to social media, especially when it comes to active youth (Haddix et al. 2015), which means that innovation is needed when the movement plans new activities.

… a nuclear winter ...And you know that the, the debate and the research and the work on that... And one of the things that we would like to do given the concern about climate change is actually to kind of focus people also in the fact that if you had any kind of significant nuclear exchanges, it's also climate change. Possibly very sudden and very dramatic that could take place and that people have got to be aware of these two strands that are climate changing in the way that he thinks(…)

(…)I see them very much as the same. And in fact, we could easily link them together, you know, if you have these kinds of weapons systems you have, as I said with the transportation of them. Yes, there's a risk of terrorism. But we, we also have the climate change element of that is wailing the environmental degradation element and... So they are linked and, and related in this way. I would say currently with younger people because the emphasis in recent years has been very much on global warming and the environmental damage.

I would say that many of them see this as the priority and... So one of our tasks is again to do the educational work and see, you do remember this huge issue is there has never the risk factor. Sometimes has diminished a bit, other times has increased but this is something that no human being should ever be allowed to have the power to do...Have that amount of power of destruction and you know, this is something we need to get cross.
(Isobel Lindsay 2019)

Actually, young people, now taking its company against nuc… nuclear weapons. Cause they bring extermination. They just don't kill lots of human beings. They sterilize a planet. So I bet for 30 years I've been seeing extermination rebellion, that now young people are really realizing that climate changes, it's February's warmest, February ever.
(Brian Quail 2019)

A comparison between climate change and nuclear exchange as disasters provides different timeframes of destruction. Although the results of climate change are already apparent in different parts of the planet, their development is more straightforward to predict than a conflict that involves a possible sudden nuclear detonation. Moreover, civil protection during climate-induced disasters is understandably simpler than after a nuclear strike. Climate change also brings devastating threats that are very difficult to solve in the current

timeframe, combined with a lack of action. One of these is a significant rise in the Wet Bulb Global Temperature (WBGT), which can make a significant area of the habited world unlivable without technical interventions such as air conditioners (Takakura et al. 2019). The rise of the WBGT especially strikes the vulnerable parts of the population, such as the poor, disabled and elderly. However, even such drastic consequences are predictable and have notably more reaction time than a single nuclear detonation over a densely populated area.

The sudden nature of a nuclear exchange seems to be the most significant concern of my informants. Even though it is not as inevitable as climate change, if the risk actualizes, the consequences are more disastrous and less controllable than with any other disaster. The vulnerabilities, especially with current localized civil defence plans and movement with Nuclear Free Local Authorities, are acknowledged, as they know that civil defence in the case of unrestrained nuclear war would be impossible to arrange adequately. As the univocal opposition to nuclear weapons has fragmented into the smaller movements and interest groups, the lack of attention regarding the issue is understandably worrisome for the disarmament activists. This notion also highlights their expertise on the issue, as their worry reflects the facts.

The informants have acclaimed the recent successes of the movement, such as Nobel Peace Prize received by the ICAN campaign for its work towards the nuclear ban treaty in the UN, but there is still room for pessimism and worry. The current uncertainty, such as the turbulent relations between the US and North Korea or between India and Pakistan, are often causing worry. The uncertainty of the nuclear situation, devolution of the former nuclear treaties, and the passivity of nuclear states are the main nominators when it comes to signing the UN ban treaty. As nuclear weapon systems are not at the centre of current public concerns as they used to be during the Cold War, the knowledge of their importance to world politics is not as evident as it used to be before. As seen from the previous extract, the activists acknowledge the new nuclear risks stemming from extra state activities, such as international terrorism. This threat can also be identified from the academic discussion post 9/11 (e.g. Helfland et al. 2002, Martin and Kushner 2011 413–437).

What's going to happen to you. They thought it was going. And we know so many statistics about how almost did happen. And now we're not saying, I am. And I suspect a lot of people are in that same, even when you hear about, um, Pakistan and India. My re- my response now all the time is, it's not going to happen.
(Ruth Overy 2019)

This unpredictability of the nuclear situation combined with the perceived indifference of the public construct the core of the discourse. The combination creates a deep state of uncertainty regarding the future of the movement, as the lessening interest and youth's focus on other issues risks discontinuity over generations. Especially in the UK, other major political events, such as Brexit, have been filling the social space, which takes the attention away from the nuclear issue even more. Even though significant changes are coming to the nuclear weapon arsenal of the country, as Trident is renewed, it seems that the political field is rather indifferent towards these significant developments. This indifferent attitude towards nuclear weapons and the lack of knowledge of their power and impact result in a vicious circle where the risk of a nuclear incident is buried under an assumed minimal probability by the public.

The unawareness of nuclear weapons pairs with Beck's idea of the invisible power of the experts. As the effects and after-effects of a nuclear blast are complicated to grasp for a layperson, and as the public discussion does not bring any desire to improve understanding, especially the youth does not see the topic as motivating. As the effects and drivers of climate change are already visible and more comfortable to understand, and the probability of its influence on everyday life is significantly greater than a nuclear exchange, it might be understandably seen as the threat having the most priority for humanity. Even though climate change is intertwined with political decision-making, it is not as dependent on high-level politics as the risk of a nuclear exchange, which might make it easier to protest against without specific political boundaries. Moreover, the actions against climate change are significantly easier to implement in everyday life by individual choice-making, which empowers climate activists, thus making it a more appealing choice as a social movement.

5.3.2 From juxtaposition to co-existence: combined power to addressing organized irresponsibility

Interestingly, the Youth and Student CND (YCND) seems to be integrating climate change activism into its agenda. For instance, they are arranging an event with the following description*:*

Join Youth and Student CND to start planning how we respond to the two big threats facing us today: climate change and nuclear weapons. What sort of actions should we be arranging? What should we post on our Instagram account? Is 'Books not Bombs' a good

slogan? These are the kind of things to be discussed and we need your input. (YCND website 2020).

The shared focus of YCND describes that the youth is aware of both the risks and how they are interrelated. This combination creates opportunities for a new kind of activism that does not ignore nuclear weapons while addressing other challenges of our time. The concept of integrating different risks might provide an interesting viewpoint for future activism, especially in the younger generation. However, this is not unusual in the history of the nuclear disarmament movement, as many of my informants also have a background in other social justice movements besides their nuclear disarmament activism.

Anthony Giddens (1990, 55–60, 158–163) regards social movements as depictions of modernity, which provide a counterforce for the four institutional dimensions of modernity: Capitalism, industrialism, surveillance and military power. The ecological movements create a tally for industrial modernism while peace movements respond to military developments. The interrelatedness of different dimensions makes the coexistence of the movements responding to these developments logical. As they are setting their commentary against these risk-producing elements of modernism, the cooperation on addressing these risks is natural as the causes and threats are strongly interrelated. This attitude is present in comments of my informants, significantly where climate change is affected by emissions by armies and possible sudden changes caused by nuclear exchanges.

Integrative activism was not uncommon in the nuclear disarmament movement either before this date. For instance, all my informants mentioned Greenham Common. What is more, all the women were involved in these demonstrations, either participating or coordinating. Although the protests mainly demonstrated against the military base, there were also feminist subtexts in the protest. Moreover, the structure of CND also reflects hybrid activism, as apart from the local groups, there are many different interest groups with their subgroups of CND, such as Christian CND and Labour CND, which reflect the commitment of multiple different values at once.

From the viewpoint of CDA, these synergies might create possibilities to tackle issues of future activism. Although climate change seems to be the priority of youth movements at the change of the decade, different actors with the scope of common goals share the stage.

According to Jodi Burkett (2012), there have already been environmentalist elements in CND activism, especially from the late 1960s, when the anthropocentric communication on the potential impact on nuclear war expanded to possible threats for nature. This message united different scopes of activism and helped the organisation to obtain support from the other thematic grounds. Even though people in the supporting movement might not have resources for nuclear disarmament activism directly, both movements benefit from combining their followers, for instance, when they support each other in event management.

As mentioned above, organised irresponsibility connects these two risks that are sparking activism by creating concern. The vast destruction of the environment forms a common denominator for nuclear explosions and the effects of climate change. Although there are some ways how the public could prepare for both of these risks, the most affected have the least means to affect the outcome. As Preston (2008) states, civil defence strategies are often targeted at white middle-class families with a property that is more suitable for protecting its inhabitants. This imbalance correlates directly with the potentially hazardous effects of climate change, and thus replicates the idea of expert control in potential disasters. As my informants see the similarities in the activism while worrying about nuclear awareness among the youth, some signs show that the youth recognise this risk as well, as discussed in chapter 5.3.

5.3.3 Modern risks and misinformation: the flammable combination

Both the disasters caused by climate change and nuclear exchange also share the difficultness of predicting the needed response. This element is crucial for reflexive modernity, as the technical complexness increases possible outcomes of a disastrous event. Moreover, both of these threats could create socially complex situations for instances related to resource scarcity, which is often a spark for multiple different conflicts, which makes the response even less calculable universally. These causations create chains of possibilities that are weakly predictable and capacity for those who are willing to respond to a crisis is most likely limited, especially if the crisis is political.

As 2020 Doomsday report states, the cyber-enabled information warfare enforces this situation, which polarises and distorts information. This kind of political campaigning destabilises international relations and creating distrust on national and international

institutions in a scope that has not been possible before. Algorithms of social media platforms enable the spreading of misinformation and disinformation for numerous different actors and help to select the uncritical audience, which increases hostilities and limited worldviews. As the Internet is accessible for many, it allows self-directive research on different topics, which can be interpreted as a method of sustaining an ontological feeling of security according to Giddens and his view of risk society (Laurent-Simpson and Lo 2019). The heated political environment is not encouraging decision-makers to compromise or seek shared solutions, as it might be fateful for their supporter engagement.

However, as the civil defence strategies of the UK from the 1970s show, spreading of misinformation is not a new political tactic. Even though the civil defence instructions on Protect and Survive could be utilisable in certain circumstances, such as in the attack with limited number and size of bombs, and far enough away from ground zero, the assumption that the instructions are only valid in these limited conditions have not been corrected to the leaflet. Moreover, the government censored some films, such a ban of showing the War Game on BBC, which could cause “nuclear panic”, as the film aimed at a realistic depiction of destruction. Even though the censorship loosened in the 1980’s the nuclear misinformation was spreading for example in the prepper magazine “Protect and Survive Monthly”, which spread the message of survivable nuclear war in 1980 and 1981.

All my informants show concern for president Trump’s communication methods and incontinency of his comments. According to them, unpredictable, populistic and authorial leaders increase the risk of drastically changing nuclear situation as their view of international relations often bases on political realism and traditional view of the nation-state as a fundamental element of politics. These same leaders are often known as climate denialists, which provides a platform for sharing the information which is not based on scientifically proven facts. Social media forms an echo chamber for these ideas, as the communities are differentiated and thus producing their modernities as Beck and Giddens suggest.

These political actors also contribute to the organised irresponsibility, as they do not regard themselves as accountable, especially when it comes to climate change. The deterrence effect and high improbability of the need to use them often explain the investments in nuclear weaponry. If this view is analysed by using CDA, the current leadership contributes to the

issues while denying their existence. The polarisation they feed can also be identified as a potential reason for a conflict, while it tries to maintain the traditional world order. That also contributes to the fear of forgetting the nuclear weapons, even though they sometimes glimpse on political discussion, they are often just a side note on the bigger picture. As the trust for international institution crumbles as a result of rising nationalism, the risks grow more prominent over time.

6. Conclusion: Nuclear disarmament movement as a reflector of risks

As I presented at the beginning of my thesis, I have two research questions that I aimed to answer: *How nuclear disarmament activists comprehend nuclear civil defence in Britain and what kind of social wrongs can be found on their opinions on nuclear civil defence.* By applying critical discourse analysis, I was able to find three different discourses that answered these questions. Two questions are often answered at once, as the discourses combine these two elements. The common factor between all the discourses and the social wrongs that appeared with them was a lack of social awareness on the impacts of nuclear weapons, including war and potential mishaps. As communicating this risk to the public can be identified as one of the main goals of the nuclear disarmament movement, according to this study, it is understandable that it appeared in all of these discourses.

The discourse of distrust highlights the communicational challenges from the governmental officials in creating awareness regarding the prevalent civil defence mechanisms in the UK. The nuclear disarmament movement regards governmental communication on the topic, both inadequate and misleading. The opinion on the amount of public awareness on nuclear weapons and the potential hazard they cause varied a lot among my informants. However, all of them agree that some information government produces on civil defence is misleading, such as Protect and Survive pamphlet from the 1970s. As nuclear weapons have lost their role in the public discussion compared to the Cold War times, the risks that their existence produces are not as obvious what that used to be.

The discourse of injustice continues with similar themes but frames the responsibility from the potential nuclear threats differently. Injustices and the risks that nuclear weapons create are divided in different proportions all locally, nationally and globally. Although the risks appear to be more significant, for instance, in the places where the nuclear weapons are stored and maintained, is the risk also divided unequally in the social sphere (Preston 2008). This injustice is also strongly related to Beck's idea of unorganised irresponsibility, as the potential nuclear mishaps affect most of those who have the least possibilities to have a saying on nuclear policies. That is highlighted in a global setting, such as with the food scarcity and other worldwide issues that nuclear exchange could act as a catalyst.

The discourse of fear of forgetting operates on similar grounds. It emphasises the perishability of the movement and similarly the awareness of the public on the topic. While the youth is focusing its attention on different topics, nuclear risk has the role of a historical remnant. Although Bulletin of the Atomic Scientists (2020) emphasises these two issues together to be the major threats for humankind and the planet as a whole, the young group of activists mainly focus on climate change. This preference is understandable, as climate change activism offers a possibility to practice activism on personal consumption choices in addition to political action. Moreover, climate change develops more slowly and steadily than sudden political bursts with nuclear threats from a high level, which might make it appear to be a more attractive platform for activism. Since societal movements are often gaining momentum from crowds, the diminishing number of activists affecting the possibilities of action for the nuclear disarmament movement might be altering the movement in the future.

As mentioned above, all of these discourses share a common concern on the lack of awareness on the public eye when it comes to nuclear weapons. The informants are not only worried about the British perspective of the movement but also the global consequences of public resistance when it comes to nuclear weapons. The movement regards univocally civil defence as a façade that justifies the existence of these weapons of mass destruction and thus does not protect public from the threats and does not virtually provide any real protection from the plausible impact. The only thing that would protect the public and environment from a nuclear disaster would be a comprehensive nuclear ban, which looks politically improbable. Despite this, the activists are continuing their work towards persuading the governments to leave nuclear weapons behind.

While activists regard civil defence as a governmental theatre to create a sense of security, the decision-makers push away actual problems related to nuclear weapons. The discourses show how the government is trying to conceal the potential harm that nuclear weapons can cause while trusting a deterrence effect exclusively on securing the civilians. This disparity is creating a void of knowledge that nuclear disarmament movement aims to reveal. The local issues that nuclear weapons cause does not reach the public, as the Scottish case on maintenance transportation of the nuclear warheads shows. The nuclear weapons and civil defence are both vanishing from the public knowledge within the social movements related to it.

The previous studies combining these topics are mostly related to the history of the civil defence. This thesis acts as a spark for the discussion from the viewpoint of peace research, and continuous research would explore civil defence in depth. As the data I used limits to the opinions of the current activists, the official governmental side of the story and current open archives would create an exciting platform for potential exploration. Moreover, my stay in Britain was limited, from which reason I was not able to perform extensive archival work. This kind of studies would also deepen the understanding of local civil defence measures and how they are linked to disarmament activism. In addition to archival work, the shelters themselves would be an interesting objective for future studies, especially in the context of social class and the availability of the protection.

Civil defence remains rather challenging topic to study, as some sections of the information regarding nuclear weapons and military strategies are always classified. Although the waves of declassification after disclosure period on governmental documents often cause new accrual of the studies on that particular field, the analysis on the current situation is often challenging to perform due to inaccessibility of the data. Despite this, the archival material will be unclassified at some point, which may provide more points of view on the research from this field. Moreover, the ever-developing situation in Britain, especially with the system that will replace Trident, is potentially changing the need for civil protection if it will change drastically from the previous one. According to my informants, change from Polaris to Trident required some political solutions for storing the nuclear waste from the previous missile system, which ended up to founding geological nuclear disposal unit in Scotland.

What is more, different countries apart from Britain, their civil defence procedures and nuclear disarmament movements would provide fertile soil for comparative studies on the topic. For instance, Finnish peace organisations have produced some material on civil defence (Finnish C100, 1983), which follows similar argumentation than its British counterparts. However, as I stated before, the Finnish civil defence system is fundamentally different compared to the British one, and a lack of nuclear weapons and deterrence effect formulates the social wrongs somewhat differently. Comparative studies with other countries might provide exciting perspectives on how the public perceives nuclear risks across the world.

Peace research has remained relatively silent on the nuclear weapons and civil defence lately, but there are various reasons why these topics should not be left to the history section of this academic field. For instance, currently, the US and Russia are negotiating on the continuation of the SALT deals. Although the news of this event has not gained extensive media coverage, is this negotiation significant when it comes to the future of nuclear non-proliferation. It is crucial that academia acknowledges this issue and uses resources to continue to explore this topic. As my thesis shows, civil protection is always politicised issue, which needs to be analysed from the viewpoint of peace research.

In the current situation with COVID-19, risk society has proven its validity as a sociological concept. When such tremendous risks actualise, the changes in the society cannot be fully predicted, even if the existence of risk is acknowledged. That reflects the potential of this theoretical approach also on the issues related to hazards concerning nuclear power and nuclear weapons. As I mentioned before, the theory itself is grounded in the Chernobyl accident, which enforces its adaptability on other nuclear-related issues. Moreover, the concept of reflexive modernity can be adapted more in-depth into the NGOs that wish to abolish social wrongs in the current societal order. Especially new forms of activism, such as social media influencers and online gatherings, would provide exciting angles to refresh the theoretical framework itself. As the origins of these sociological concepts root from the late 20th century, there is a need for further discussions that also include risk society to analyses of the current events.

All in all, there are multiple opportunities to find more depth on this topic, as it has not been explored extensively before. This absence creates room for more studies, although it seems that nuclear issues are not on societal agendas as the perceived risk of nuclear mishaps is estimated to be relatively low. Despite this, the risk still exists in the current political arenas and conflict situation that includes a risk of usage of nuclear weapons can develop rapidly. There are multiple examples of this in current politics, such as the nuclear threat during Russian invasion over Crimea (Nuzov 2016), the conflict of Kashmir area (Robock et al. 2019), North Korean nuclear tests (Kim et al. 2017), and the tightened discussions between the US and Iran at the beginning of 2020 (Kaur et al. 2020). These instances still show that nuclear exchange is still an option when it comes to international relations and should be examined further also in academia.

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